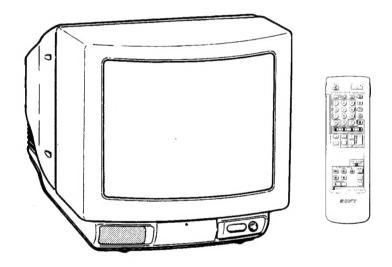
# **SERVICE MANUAL**

# BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-M2540D	RM-833	AEP	SCC-G77G-A	KV-M2541E	RM-833	Spanish	SCC-G82E-A
KV-M2541D	RM-833	AEP	SCC-G77F-A	KV-M2541L	RM-833	IRISH	SCC-G83D-A
KV-M2541A	RM-833	Italian	SCC-G81F-A	KV-M2541U	RM-833	UK	SCC-G87D-A
KV-M2540B	RM-833	French	SCC-G85F-A	KV-M2540K	RM-833	OIRT	SCC-G86E-A
KV-M2540E	RM-833	Spanish	SCC-G82F-A	KV-M2541K	RM-833	OIRT	SCC-G86D-A







ITEM MODEL	Television System	Channel Coverage	Color System
AEP	B/G/H, D/K	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, L, I	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UFH:21-69 I UHF: B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO-IN)
Spanish	B/G/H	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69	PAL NTSC4.43, NTSC3.58 (VIDEO-IN)
Irish	I	VHF: A-J C10 (224MHZ) UHF: E21-E69 CABLE SO1-S41	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	UHF: B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H	B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	AEP Text	AEP Non Text	Italian	French Non Text	Spanish Text	Spanish Non Text	Irish	UK	OIRT TEXT	OIRT NON TEXT
Power Consumption	85W	85W	85W	85W	85W	85W	109W	109W	85W	85W

### **SPECIFICATIONS**

Picture Tube

Hi-Black Trinitron

Approx. 63 cm (25 inches)

(Approx. 60 cm picture measured

diagonally)

110° -deflection

### **Input/Output Terminals**

#### [REAR]

Ö-1 21-pin Euro connector (CENELEC standard)

- inputs for audio and video signals

inputs for RGB

- outputs of TV video and audio signals

[FRONT]

€2Video input - phono jack

→2 Audio inputs - phono jacks

€32S video input 4-pin DIN

 $\Omega$  Headphone jacks: stereo minijack

Sound output

10W (Music)

Power requirements

220 - 240V

**Dimensions** 

 $Approx.\ 500x580x520\ mm$ 

Weight

Approx. 43kg

Supplied accessories

RM-833 Remote Commander (1)

IEC designation R6 battery (1)

Other features

FASTEXT, TOPTEXT.

[RM-833]

Remote control system

infrared control

Power requirements

1.5V dc

1 battery IEC designation

R6 (size AA)

Dimensions

Approx. 65x225x21 mm (w/h/d)

Weight

Approx. 157g (Not including batteries)

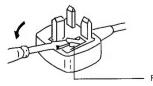
Design and specifications are subject to change without notice.

Model	KV-M2541A	KV-M2540B	KV-M2540D	KV-M2541D	KV-M2540E	KV-M2541E	KV-M2540K	KV-M2541K	KV-M2541L	KV-M2541U
Item '										
RGB Priority	ON	ON	OFF							
Scart 1	ON									
Front in (3)	ON									
AKB in 16:9 mode	ON									
Norm B/G	ON	OFF	OFF							
Norm I	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
Norm D/K	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
Norm AUS	OFF									
Norm L	OFF	ON	OFF							
Teletext	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
Language Preset	Italian	French	Deutch	Deutch	Spanish	Spanish	OIRT	OIRT	English	English

## WARNING (KV-M2541L/KV-M2541U only)

The flexible mains lead is supplied connected to a **B.S.** 1363 fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP** FUSE approved by **ASTA** to **BS** 1362, ie one that carries the mark.

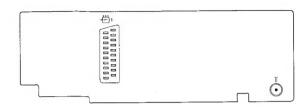
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET. When an alternative type of plug is used it should be fitted with a **5 AMP** FUSE, otherwise the circuit should be protected by a **5 AMP** FUSE at the distribution board.

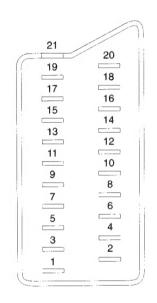


How to replace the fuse. Open the fuse compartment with the screwdriver blade and replace the fuse.

FUSE

## 21 pin connector ( ö-1 )





Pin No.	1	2	4	Signal	Signal level			
_		_		Audio output B	Standard level : 0.5V rms			
1	0	0	0	(right)	Output impedance : Less than 1kohm*			
_	2 O O Audio input B S (right)		Audio input B	Standard level: 0.5V rms				
2				Output impedance : More than 10kohm*				
_	$\overline{}$			Audio output A	Standard level: 0.5V rms			
3	0	0	0	(left)	Output impedance : Less than 1kohm*			
4	0	0	0					
5	0	0	0	, ,				
6	0	0	0	Audio input A	Standard level : 0.5V rms			
				(left)	Output impedance : More than 10kohm*			
7	0	•	•	Blue input	0.7 ± 3dB, 75 ohms, positive			
					High state (9.5 - 12V) : Part mode			
8	0			Function select	Low state (0 - 2V) : TV mode			
				(AV control)	, , , ,			
					Input capacitance : Less than 2nF			
9	0	0	0					
10	0	_		Open	0 2 0 0 7 0 0 7 0 0 10 0 0 0 0 0 0 0 0 0 0			
11	_	_		Green	Green signal: 0.7 ± 3dB, 75 ohms, positive			
12	0		_	Open (cod)				
13	0	0	0	, ,				
14	0	0	0	, ,,	0.7 ± 3dB, 75 ohms, positive			
45	0	-	_	Red input	0.7 ± 3dB, 75 offins, positive			
15	-	0	0	(S signal) croma input	0.3 ± 3dB, 75 ohms, positive			
	-	-		Blanking input	High state (1 - 3V) Low state (0 - 0.4V)			
16	0	•	•	(Ys signal)	Input impedance : 750hms			
	-			Ground(video	mpat impodance : 7 comine			
17	0	0	0	output)				
	_		-	Ground(video				
18	0	0	0	input)				
19	0	0	0	Video output	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB			
	0	_		Video input	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB			
20	Ĭ	0	0					
20				Y (S signal)	$1V \pm 3$ dB,75ohms,positive sync: 0.3V(-3+10dB			
04		_		Common ground				
21	10	10	0	(plug, shield)	I .			

○ Connected ● Not Connected (open)

\* at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	$1V \pm 3dB$ 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.



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#### CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

#### WARNING!!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ... ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

### ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

#### ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ!!

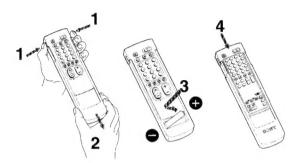
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE : SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

# SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.



## Inserting the Battery Into the Remote Commander



Remove the cover.

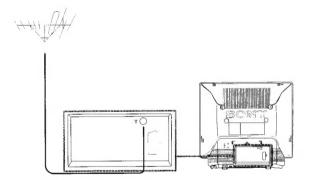
Check the correct polarity.

Refit the outside cover making sure that the Full Function side is visible.

### **About Battery Life**

Under normal operation, a battery will last up to half a year.

## **Connecting the Aerial**



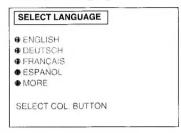
## Choosing a Language

(See inside of front cover and back cover)

- **1** Depress ① A on the TV. The TV turns on. If the standby indicator B on the TV is lit, press ○ 3 or any number button 4 on the Remote Commander.
- **2** Press MENU on the Remote Commander. The SELECT LANGUAGE screen appears.



**3** Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives). The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



**Note:** From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button **17** then press the white button **17** to redisplay the SELECT LANGUAGE screen.

## Tuning in to Channels

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning:

A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the

channel numbers of stations.

manual tuning: Use if you are familiar with the

channel numbers of stations. (Channel numbers from the main UK transmitters are shown on page 13)

Choose the more appropriate way for you.

#### **Tuning in to Channels Automatically**

There are two possibilities for auto tuning;

A. On the TV: hold down on the front of the TV for 2 seconds (All receivable channels are tuned in the order noted below).

or

B. On the Remote Commander: as follows

1 Press MENU 7.

**7** Press the yellow button 17.

**?** Hold down the red button 17 for 2 seconds,

**Note:** Press the green button 17 to cancel.

Channels are au	itomatically stored as follo	ws:
	KV-M2541U	KV-M2541L
Programme1	BBC1	RTE1
Programme2	BBC2	RTE2
Programme3	ITV	BBC1
Programme4	CH4 or S4C	BBC2
Programme5	_	ΠV
Programme6		CH4 or S4C

**Note:** Programme names are automatically taken from TELETEXT if available. If not, "----" is placed in the name.

- If you connect a VCR via the aerial cable, set the VCR to its test signal or play mode before auto-tuning.
- You may have to exchange the programme positions, if there are duplicated signals from local transmitters.

## **Tuning in to Channels Manually**

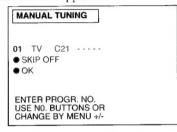
Press MENU 7. The MENU screen appears. MENU

Press the yellow button 17 to select PRESET. The PRESET screen appears.

PRESET AUTO TUNING • MANUAL TUNING • PROGR EXCHANGE EDIT PROGR NAME • FINE TUNE SELECT COL. BUTTON

Press the green button 17 to select MANUAL TUNING.

The MANUAL TUNING screen appears.

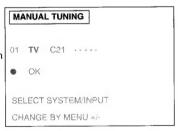


Press the number buttons 4 or MENU+/- 9 to select a programme position.

If you use the number buttons 4, enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

5 Press the green button 17.

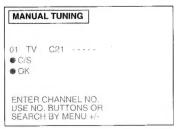
Note: Use MENU +/- 9 to select "TV". You can alternatively select input sources which may be assigned to programme positions. The display changes as follows:





6 Press the green button 17.

Note: If a video input source is selected in step 5, this is now stored. Refer to step 4 to tune other programme positions.



(KV-M2541L only) Press the red button 17 to select C (regular channel) or 5 (cable channel).

Press the number buttons 4 or MENU+/- 9 to select the channel number.

If you use the number buttons  $\boxed{4}$ , enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

Note: Programme names are automatically taken from TELETEXT if available. If not, "----" is placed in the name. Or if you select AV1, RGB, AV2 or YC2 as an input source, AV1, RGB, ... is placed.

Q Press the green button 17 to store.

Note: If you want to preset other channels, repeat steps

Press MENU 7 twice to return to the normal

Note: You can skip unused programme positions when selecting programmes with the PROGR +/- buttons 18 Press the red button 17 to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

## **Basic TV Operations**

## Turning the TV on and off

**Turning on** 

Depress ① A on the TV.

Turning off temporarily

Press & 10 on the Remote Commander.

The TV enters standby mode and the standby indicator B on the front of the TV lights up.

**Turning on again** Press  $\bigcirc$  3, PROGR+/- 18, or one of the number buttons 4 on the Remote Commander.

**Turning off completely** 

Depress ① A on the TV.

**Note:** It is recommended to use ① **A** to turn off the TV. This could help you save energy.

**Selecting TV Programmes** 

Press PROGR+/- **18** or press number buttons **4**.

To select a double-digit number

Press -/-- **5**, then the number buttons **4**.

#### Adjusting the Volume

Press 4-/- 19.

#### Muting the Sound

Press 🕸 🚺

To resume normal sound, press ♥ 1 again.

Displaying the On-screen Indications

Press (14) once to display the on-screen indications. Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows

Press  $+/-\boxed{D}$  to adjust the volume. Press P+/- $\boxed{C}$  to select programme numbers or to turn the TV on from the standby mode.

Press to select the input source.

Press **E** to preset channels automatically.

## Advanced TV Operations

## **Operating the Menu System**

You can adjust picture, preset channels to programme positions and utilise other convenient features by using the following menu system.

Pres	ss;	to;		
1	MENU 7	enter the MENU screen		
2	a colour button 17	select an item you want to change (The selected item is marked by a triangle.)		
3	MENU+/- 9 + -	change (or adjust) the contents of the item		
4	MENU 7	return to the MENU screen		
5	MENU 7 again	return to the normal screen		
	Press MENU <b>7</b> once or twice whenever you want to return to the normal screen.			

**Note:** When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

## **Adjusting the Picture**

Although picture is adjusted at the factory you can adjust it to suit your own taste.

1 Press MENU 7.
The MENU screen appears.



<b>7</b> Press the red butto	n 17 to select PICTURE.
------------------------------	-------------------------

3 Press the respective colour button 17 to select an

4 Press MENU +/- 9 to adjust.

Press MENU 7 twice or wait until the menu displays disappear automatically to return to the normal screen.

### **PICTURE ADJUSTMENT**

(First Page)

• •	101111111111111111111111111111111111111
⊕ d1	
• (D)	***************************************
<ul><li>MOR</li></ul>	E

Press colour button	Effect
Red: For Picture •	Less ——— More
Green: For Colour ③	Less ——I—— More
<b>Yellow:</b> For Brightness	Darker ———— Brighter
Blue: For Sharpness ①	Softer ——!—— Sharper
White:	Next page of PICTURE ADJUSTMENT

## **PICTURE ADJUSTMENT**

(Second Page)

PICTU	RE ADJUSTMENT
COLC	OUR TONE NORMAL
NOIS	E REDUCE ON
FORM	MAT NORMAL
0 tx 2:1	
BACH	<

Press colour button	Effect
Red: For Colour Tone	Normal -> Warm (reddish colour tone) -> Cool (blueish colour tone)
Green: For Noise Reduce	ON: Reduces picture noise (in case of low signal level) OFF: Normal setting
Yellow: For Format	Normal: Normal setting 16:9 Wide screen effect
Blue: For Hue control № (only for NTSC video signals)	Reddish ———— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

**Note:** Press →•• 8 on the Remote Commander to reset to the factory preset levels for picture.

## **Using Special Features**

With your TV you can utilise special features such as Parental Lock or Sleep Timer.

Press MENU 7. The MENU screen appears.

MENU

2 Press the green button 17 to select FEATURES.

Press the respective colour button 17 to select an

4 Press MENU +/- 9 to change.

**5** Press MENU 7 twice or wait until the menu displays disappear automatically to return to the normal

## **FEATURES**

## FEATURES

- ➤ SLEEP TIMER OFF

   PARENTAL LOCK OFF

   TV BUTTON LOCK OFF
- DEMO MODE
- LANGUAGE

SELECT COL. BUTTON CHANGE BY MENU +/-

Press colour button	Effect
Red:	
For Sleep Timer	OFF -> 0:30 -> 1:00 -> 1:30 -> 2:00 (hours)
(Automatic	After the selected time the TV set
switch off	switches itself automatically into
function)	standby mode.
Green:	
For Parental Lock	OFF: Normal setting
(For preventing	ON: The TV-channel you are
children from	watching is now blocked. In this way
watching	you can prevent undesirable
programmes	broadcasts from appearing on the
which you consider	screen.
unsuitable)	
Yellow	
For TV Button Lock	OFF: Normal setting
	ON: The buttons on the TV do not
	function anymore.
	(The Remote Commander still
	operates)
Blue:	
For Demo Mode	ON: A sequence of menu pictures
	is displayed.
	Press any button on the
	Remote Commander to stop the
	function.
White:	
For Language	The SELECT LANGUAGE screen
	appears.

## **Advanced Presetting Functions**

**Exchanging Programme Positions** 

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24)).

1 Press MENU 7.
The MENU screen appears.



2 Press the yellow button 17. The PRESET screen appears.

**3** Press the yellow button **17**. The PROGR EXCHANGE screen appears.



- 4 Press the white button 17 repeatedly until the desired programme number (09) appears.
- 5 Press the red or the green button 17 repeatedly until the desired channel number (C24) appears.
- **6** Press the white button 17 to store. Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.
- **7** Press MENU 7 twice to return to the normal screen.

## **Editing Programme Names**

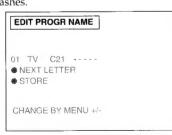
You can edit the programme names up to five letters.

1 Press MENU 7. The MENU screen appears.



Press the yellow button 17. The PRESET screen appears.

**3** Press the blue button 17. The EDIT PROGR NAME screen appears. The first character flashes.



4 Press MENU+/- 9 to edit the first letter.
The first letter changes as follows;

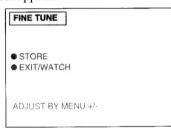
 $A \leftrightarrow B \leftrightarrow \ldots \leftrightarrow Z \leftrightarrow 0 \leftrightarrow 1 \leftrightarrow \ldots \leftrightarrow 9 \leftrightarrow "-" \text{ (space)}$ 

- Press the red button 17 to move to the next letter.
- 6 Repeat steps 4 to 5, until the fifth letter is chosen.
- **7 Press the green button 17**. The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

#### **Fine Tuning**

You can adjust the receiving condition by the FINE TUNE function.

- 1 Press MENU 7.
  The MENU screen appears.
- 2 Press the yellow button 17. The PRESET screen appears.
- **3** Press the white button 17 again. The FINE TUNE screen appears.



- 4 Press MENU+/- 9 to adjust the receiving condition.
- **5** Press the red button 17 to store the adjustment, or press the green button 17 not to store.

  Then the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

1 Press C 16 on the Remote Commander. The indicaton "C" appears on the screen.

**Note:** (KV-M2541L only) For cable channels, press C **16** twice. The indication "S" appears.

2 Enter a double-digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).

The channel appears. However, the channel is not stored.

## **Teletext Operation**

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

## **Basic Teletext Operation**

Switching Teletext on and off

- 1 Select the channel which carries the teletext service you wish to view.
- Press 11 to display Teletext.

  If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

## Input three digits for the page number using the number buttons $\boxed{4}$ .

The numbers are displayed on the screen and the requested page appears in a few seconds.

Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

## 4 Press 3 to return to the TV mode.

Note: To change the teletext channels. First press 
Teturn to the TV mode, then repeat steps 1 to 3.

Note: If the signal of a TV channel is weak, teletext errors

may occur.

Advanced Teletext Operation

#### **Using Fastext**

With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons 6 on the Remote Commander.

Press the corresponding colour button **6** on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

## Requesting the Index page

Press 17. The Index page appears.

#### Accessing the next or preceding page

Press (PAGE +) or (PAGE -) (18). The next or the preceding page appears on the screen.

## Superimposing the teletext display on the TV picture

Press (a) 11 once if you are in text mode or press (a) 11 twice if in TV mode.

To return to the normal teletext display press ( 11 again.



## Preventing a teletext page from being updated or changed

Press (HOLD) 2. The HOLD symbol (19) appears on the screen and the selected subpage is held until you press (1) to cancel.

Enlarging the teletext display

Press (\*) 13 once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.

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### TEXT TOE Types 10 July 1754 54

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Revealing concealed information (e.g. answers to a quiz) Press ② (REVEAL) 4. The information is revealed. Press ② 4 again to conceal the information.

Watching TV while waiting for a requested page to be displayed

- 1 Request a new teletext page.
- 2 Press ⊠(TEXT CL) 12.

The TV programme is displayed and the symbol is displayed at the top of the page.

**Note:** When the requested page is available the page number is displayed at the top of the screen.

**?** Press 🗐 🔟 to view the page.

Note: To cancel the request

Display the teletext page, then press (11). The request is now cancelled. Press (3) to resume TV mode.

Using the Favourite Page system

You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

#### **Storing the Favourite Pages**

- 1 Select the page you would like to store using the number buttons 4.
- Press •> 15 twice.

  The colour prompts at the bottom of the screen flash.
- Press any of the colour buttons 6 on the Remote Commander to store the selected page.

  The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

### Displaying the Favourite pages

1 Press ↔ 15.

2 Press the colour button 6 corresponding to the colour prompt onto which the desired page is stored. The page is requested. (It may take a few seconds to be received).

**Note:** Step 1 must be taken before every favourite page selection, otherwise the normal Fastext facility operates.

#### Using the Time Function in the TV mode

Press (1) 12 to request the time. Press again to cancel the request.

**Note:** This function is available only when teletext is broadcast.

## **Connecting Other Equipment**

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
-∷ 1 L (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
<b>-○2/-○2 GH</b> (AV2)	Audio/video signal	No outputs
<b>-&gt;2/-</b> - <b>32 G I</b> (YC2)	Audio/S video signal	No outputs

To watch a video input picture, press 🛨 🙎 until the
desired video input appears.
To return to the normal TV picture, press 🛨 🙎
repeatedly or press 🔘 🔞.
N 4 76 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Note: If you have a decoder, connect it to -51 L.

## Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal  $\boxed{\mathbf{K}}$  of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 6.

Note: S video input (Y/C input) \[ \begin{align\*} \]
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 1 video input terminal through which these signals can be input directly.

## Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VCRs or video disc players.

## **Tuning the Remote Commander to the equipment**

Set the VTR 1/2/3 MDP selector 20 according to the equipment you want to control:

VTR 1: Beta VCR VTR 2: 8mm VCR VTR 3: VHS VCR MDP: Video Disc Player

2 Use the buttons 21 to operate the additional equipment.

**Note:** If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.

**Note:** If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

**Note:** When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

## **Using Headphones**

You can utilise headphones. Connect them to the headphone jack  $\boxed{J}$ , then the sound from the speaker goes off.

## For your information

## **Troubleshooting**

Here are some simple solutions to problems which may affect the picture and sound.

### No picture (screen is dark), no sound

- Plug the TV in.
- Prug the TV in.
  Press ① A on the TV. (If the standby indicator B is lit, press 3 or any number button 4 on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ① A.

## Poor or no picture (screen is dark), but good sound

## Good picture but no sound • Press ✓+ 19.

- If  $\$ is displayed on the screen, press  $\$  $\$ 1.

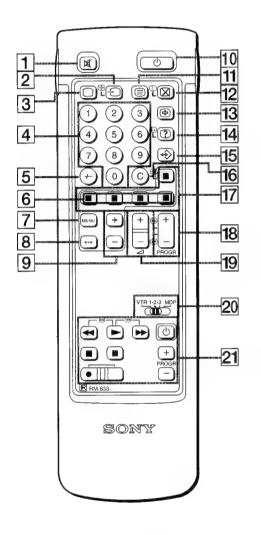
No colour for colour programmes

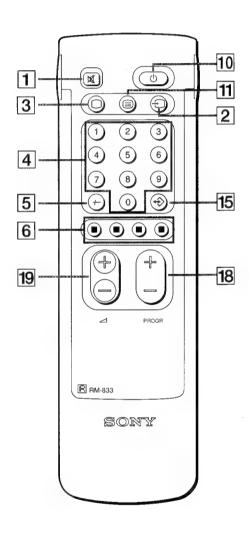
• Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust 3.

## Remote Commander does not function

• Replace the battery.

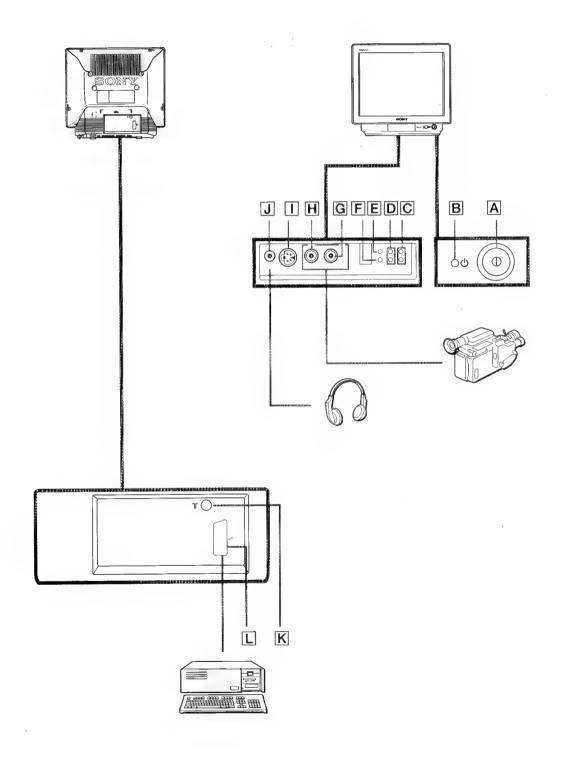
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.





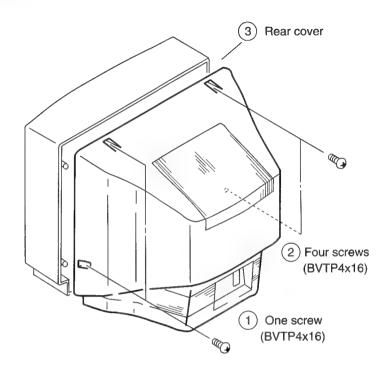
Full-Function Side

Simple Side

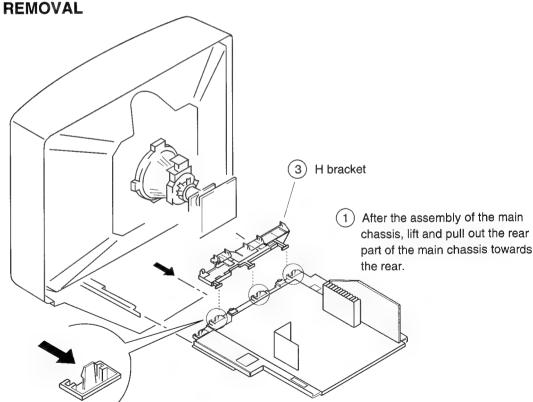


# SECTION 2 DISASSEMBLY

## 2-1. REAR COVER REMOVAL

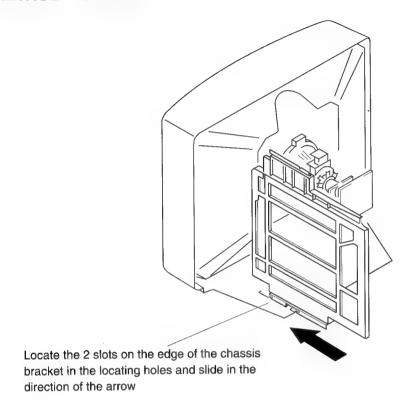


## 2-2. CHASSIS ASSY REMOVAL



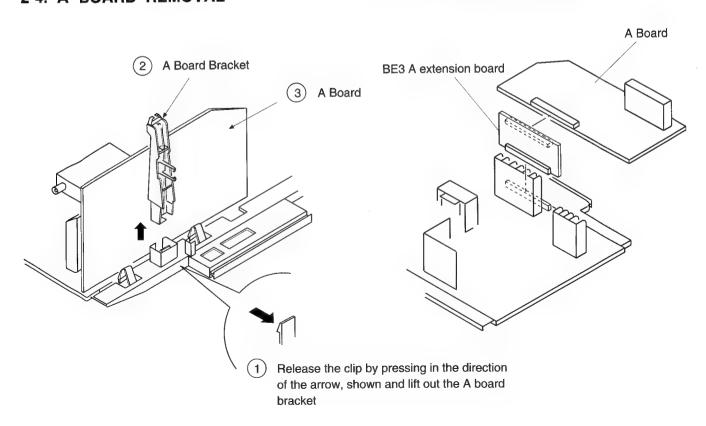
2 Push the three claws of the main chassis in the direction of the arrow and remove the H bracket upwards.

## 2-3. SERVICE POSITION

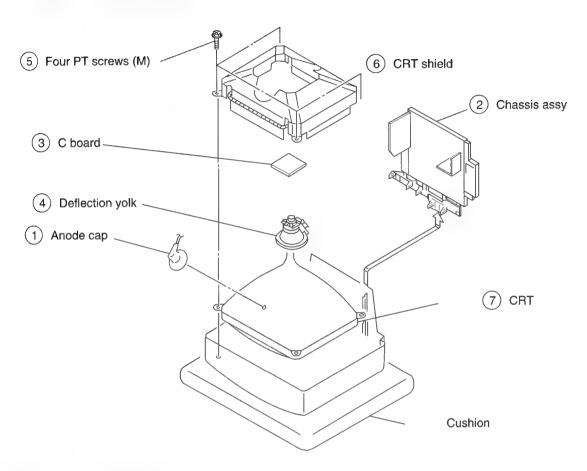


## 2-4. A BOARD REMOVAL

## 2-5. EXTENSION BOARD



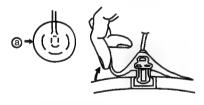
## 2-6. PICTURE TUBE REMOVAL



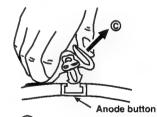
## REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

## \* REMOVING PROCEDURES.



- 1 Turn up one side of the rubber cap in the direction indicated by the arrow (a)
- - 2 Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b)



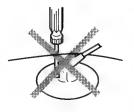
When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ©

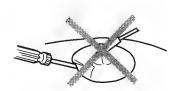
#### HOW TO HANDLE AN ANODE-CAP

- 1 Don't damage the surface of anode-cap with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!

A metal fitting called as shatter-hook terminal is built into the rubber.

3 Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or damage the rubber.





# SECTION 3 SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings:

Contrast	 . 80%	(or remote control
	norma	al)
☼ Brightness	 50%	

- Carry out the following adjustments in this order:
- 1. Beam landing
- 2. Convergence
- 3. Focus
- White balance

Note: Testing equipment required.

- 1. Color bar/pattern generator
- 2. Degausser
- 3. DC power supply
- 4. Digital multimeter
- 5. Oscilloscope

#### Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

### 3-1. BEAM LANDING

- Input the white signal with the pattern generator.
   CONTRAST BRIGHTNESS normal
- 2. Position neck assy as shown in Fig.3-2.
- 3. Set the pattern generator raster signal to red.
- 4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 3-3)
- 5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
- 6. Switch the raster signal to blue, then to green and verify the condition.
- 7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
- 8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

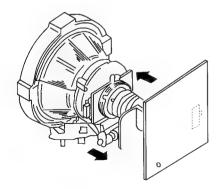
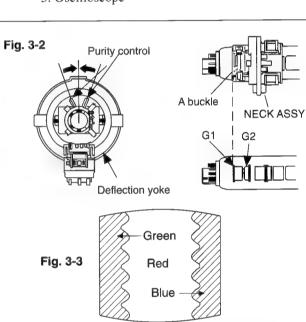
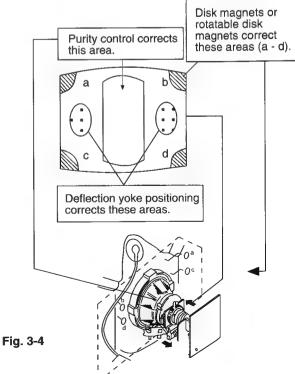


Fig. 3-1



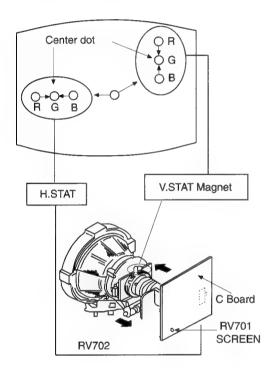


## 3-2. CONVERGENCE

### Preparation:

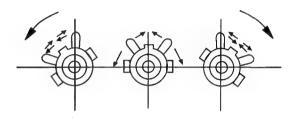
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

## (1) Horizontal and vertical static convergence

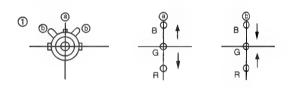


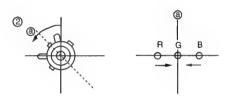
- 1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
- 2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
- If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

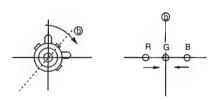
• Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

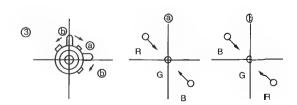


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.

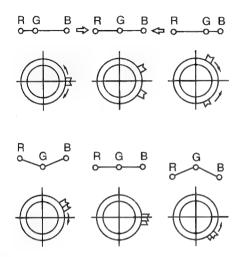




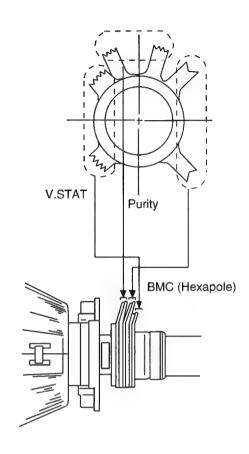




• Operation of BMC (Hexapole) Magnet



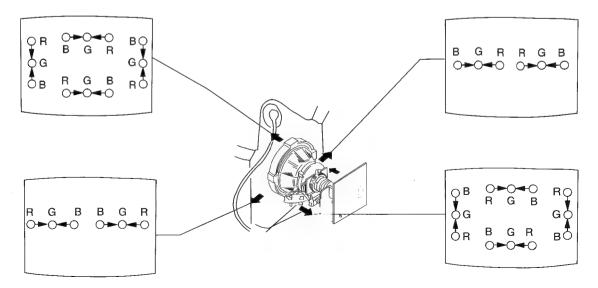
 The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
 Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).



### (2) Dynamic convergence adjustment.

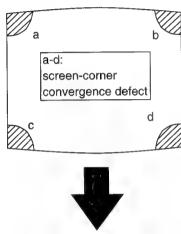
## Preparation:

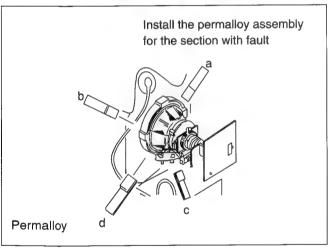
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
- 1. Slightly loosen the deflection yoke screws.
- 2. Remove the deflection yoke spacer.
- 3. Move the deflection yoke as shown in the figure below and optimize the convergence.
- 4. Tighten the deflection yoke screws.
- 5. Re-install the deflection yoke spacer.



## (4) Screen corner convergence.

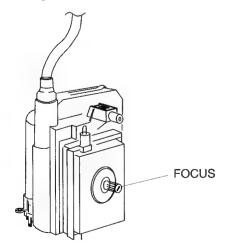
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





### 3-3. Focus

Adjust the focus to optimize the screen.



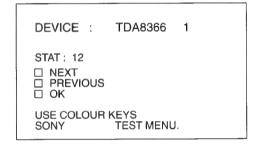
## 3-4. WHITE BALANCE

## Screen G2 Setting

- 1. Input the dot signal from the pattern generator.
- 2. Set the picture brightness control to its lowest level.
- 3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
- 4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

## White balance adjustment

- 1. Receive an all-white signal.
- Enter into service mode. (Refer to the section 4
  "Electrical Adjustment" on how to enter service
  mode.)
- 3. Select TDA8366 1 on menu.



- 4. Press the White button on the Remote Commander to enter into the device Menu.
- 5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
- Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
- 7. Press the Red button to select HWB BLUE, adjust with the + and menu buttons so that the white balance becomes optimum.
- 8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

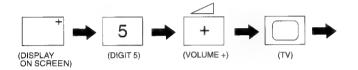
# SECTION 4 CIRCUIT ADJUSTMENTS

## 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

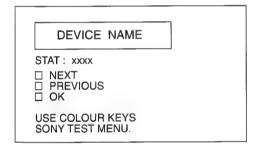
### HOW TO ENTER INTO SERVICE MODE

- 1. Turn on the main power switch of the set and enter into standby mode.
- Press the following sequence of buttons on the Remote Commander.

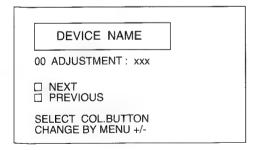


"TT" will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).



- 5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the ☑ and ☑ buttons to change the data to comply with each standard.
- Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, and TDA6622

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interlace	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Srce Sel 1	00	AFC Wind	. 00
Srce Sel 2	00	IF Sensty	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

	•	•	
TDA6622	INIT VALUE	TDA6622	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	31	AM	00
Vol R Sp	31		
Vol HP	00	1	
PII Sync	00	_	
Mute 3	01	1	
Treble	07	1	
Bass	15	1	
X Talk Adj		1	
Mute 1	00	1	
	<del>                                     </del>	→	

## 4-2. TEST MODE 2:

Is available by pressing Test button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing Condition (Volume min., Picture max., Brightness max.
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	"Menu" Flag request
10	Tenth entry is deleted
11	dummy
12	dummy
13	dummy
14	Forced AV 16:9 detection on/off
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.
17	Preset Label for AV Sources
18	RGB Priority on/off
19	Clear all preset labels
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24	Set destination = U RGB Priority = Off
25	Set destination = D RGB Priority = Off
26	Set destination = B RGB Priority = On
27	Set destination = K RGB Priority = Off
28	Set destination = L RGB Priority = Off
29	Set destination = E RGB Priority = Off

30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	dummy
39	dummy
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Pressetting Mode The channel pressetting can be done by a Special IR Transmitter ( Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by $\mu$ -Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

**Note**: For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

### SUB BRIGHTNESS ADJUSTMENT

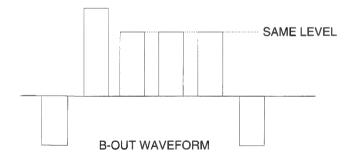
- 1. Input a Phillips pattern.
- 2. Enter into service mode and press 23.
- 3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

## SUB CONTRAST ADJUSTMENT

- Input a video that contains a small 100% area on a Black Background.
- 2. Enter into service mode and press 01 to have PIC max followed by 21.
- Connect oscilloscope to pin 1 of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

#### SUB COLOR ADJUSTMENT

- 1. Input a PAL color bar signal.
- Connect an oscilloscope to pin (3) of CN703 (B OUT) on the C board.
- 3. Enter into service mode and press 22.
- 4. Adjust data so that the right sides of the waveform are set to the same level.



## I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

- 1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
- Receive a channel so that the I.C. is selected for negative modulation.
- 3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

## I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

- Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
- Receive a channel so that the I.C. is selected for negative modulation.
- 3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

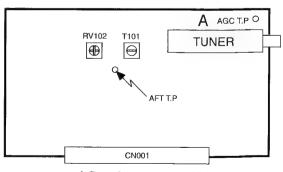
## L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

- Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
- 2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
- 3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

**Note**: Only adjust RV102 after T101 has been correctly adjusted.

### AGC ADJUSTMENT

- 1. Receive an off- air signal.
- 2. Enter the service mode, ("Test" "Test") and 35.
- 3. Adjust the data so that there is no snow or cross modulation visible on the screen.
- Change the receiving off-air channel, and confirm the above status.



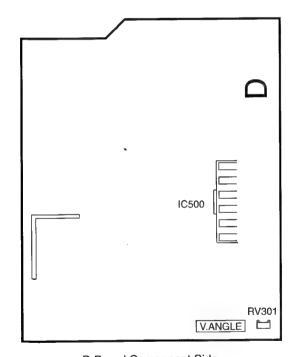
A Board component side -

## DEFLECTION SYSTEM ADJUSTMENT

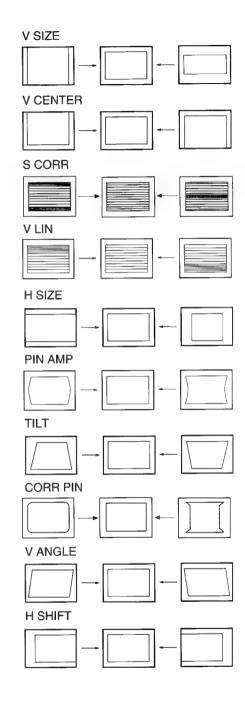
- 1. Enter into service mode.
- 2. Select and adjust each item in order to obtain the optimum image.

Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
Ó4	H SIZE	ADJ.
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09	V SIZE	ADJ.
0A	S CORR	ADJ.
ОВ	V CENTER	ADJ.

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -



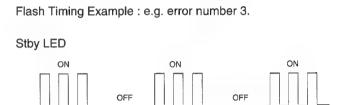
## 4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways:-1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

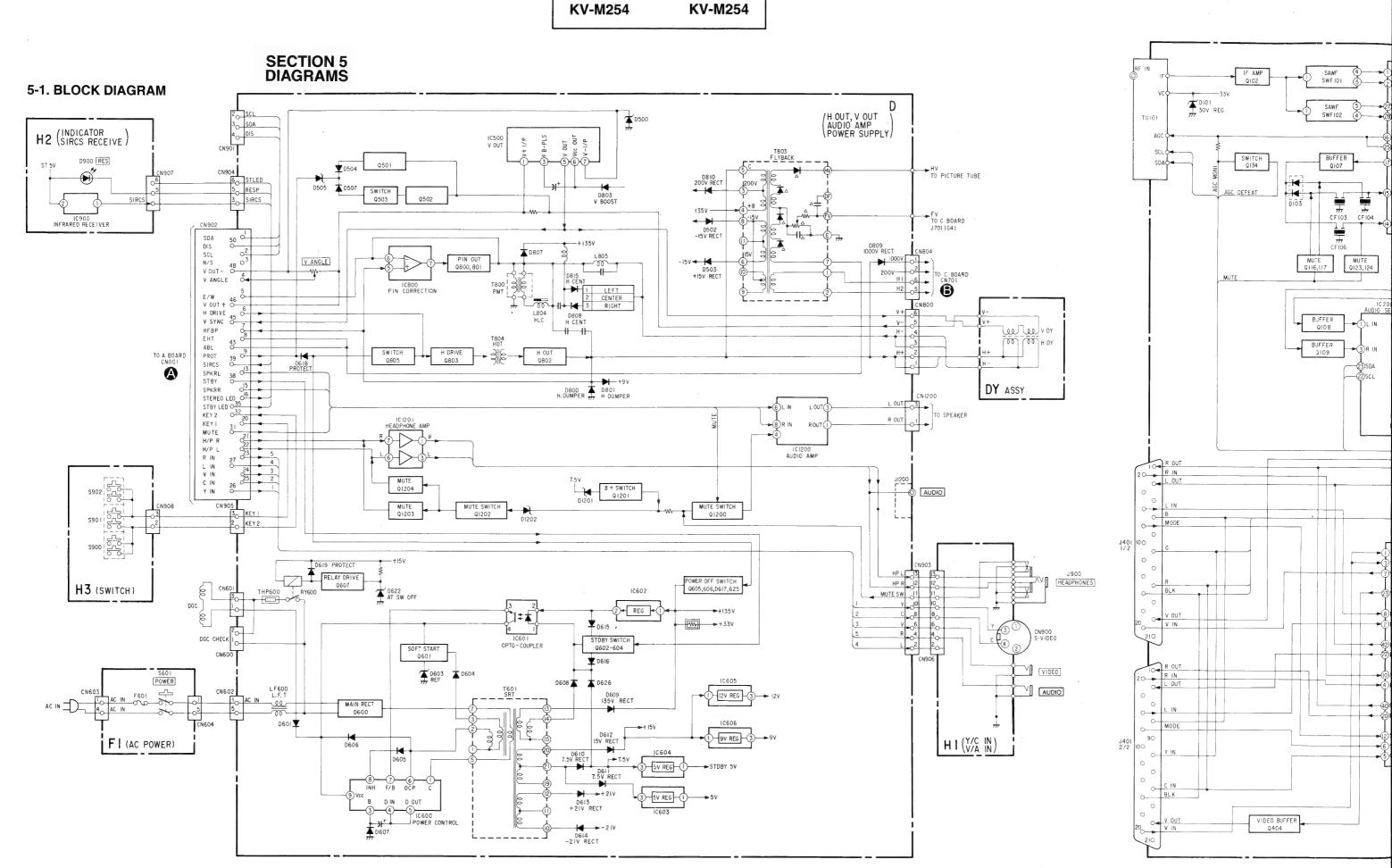
If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

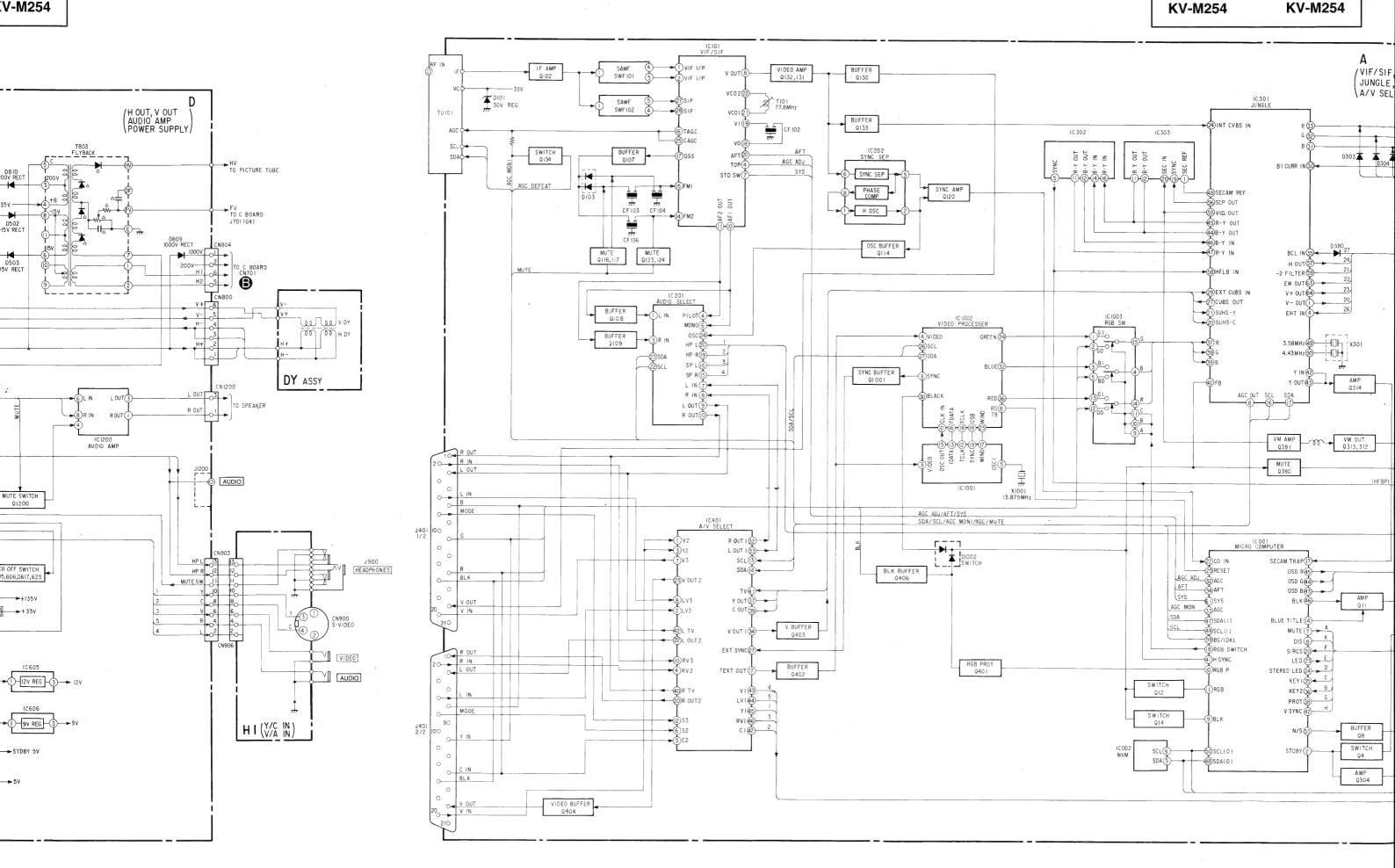
Table 1

Device	LED Error Count	Fatal Error
NVM	29	√
Teletext	10	
Jungle	11	V
Video_sw	12	
Tuner	13	1
Nicam	14	
Audio_cont	15	√

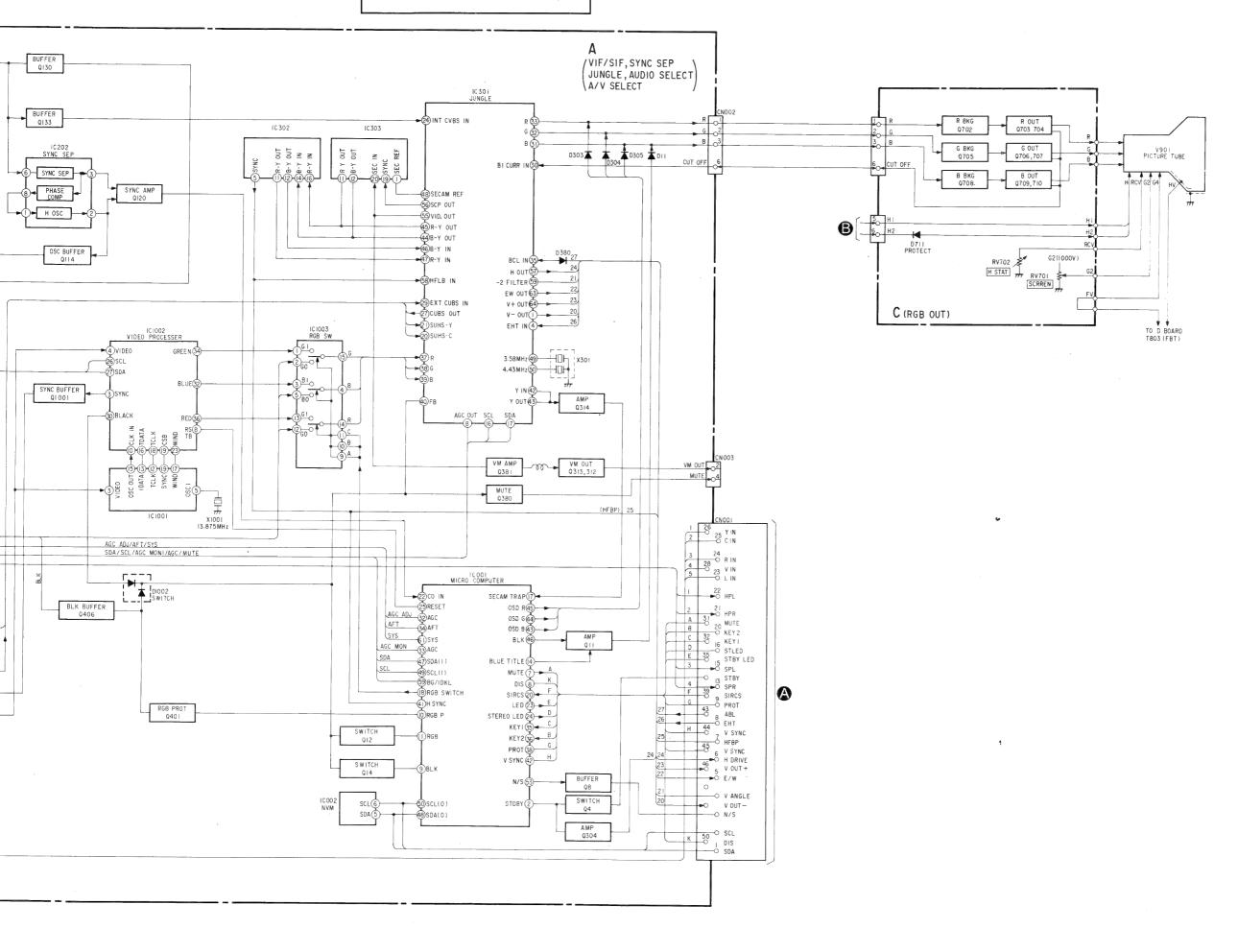


МЕМО				
			,	
		 <u></u>		
		 		-
		 •		
		 4 M. A. A. P. T.	·	
	<u> </u>	 	-	

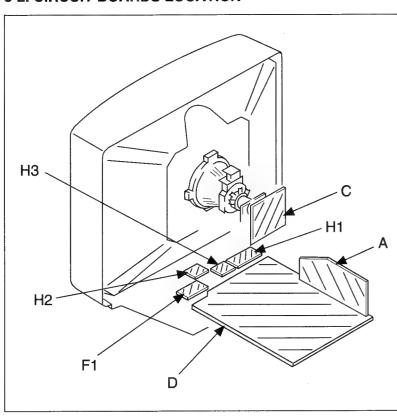




KV-M254



### 5-2. CIRCUIT BOARDS LOCATION



#### 5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in  $\mu\,F$  unless otherwise noted. pF:  $\mu\,\mu\,F$  50WV or less are not indicated except for electrolytic.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch: 5mm Rating electrical power: 1/4W

- Chip resistor is in 1/10W.
- All resistors are in ohms.  $k~\Omega = 1000~\Omega,~M~\Omega = 1000K~\Omega$
- - : nonflammable resistor.
- · fusible resistor.
- $\Delta_{\pm}$  internal component.
- panel designation or adjustment for repair.
- All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- · All voltages are in V.
- Readings are taken with a  $10M\,\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B + bus.
- = : B bus.
- signal path.(RF)
- \_\_\_ : earth ground
- · : earth chassis

Reference information

RESISTOR RN : METAL FILM RC : SOLID

FPRD : NONFLAMMABLE CARBON
FUSE : NONFLAMMABLE FUSIBLE
RS : NONFLAMMABLE METAL OXIDE
RB : NONFLAMMABLE CEMENT
RW : NONFLAMMABLE WIREWOUND

\*\* : ADJUSTMENT RESISTOR
LF-8L : MICRO INDUCTOR

В

D

G

Н

PT : MYLAR

MPS : METALIZED POLYESTER

MPP : METALIZED POLYPROPYLENE

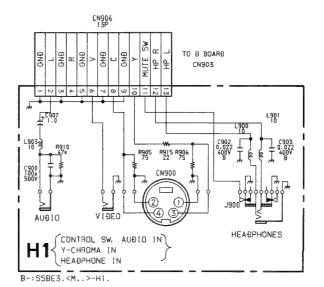
ALB : BIPOLAR

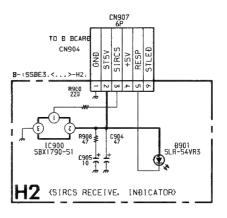
ALT : HIGH TEMPERATURE ALR : HIGH RIPPLE

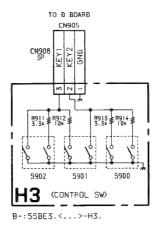
Note: The components identified by shading and mark

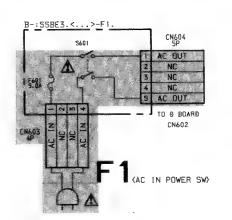
A are critical for safety. Replace only with
part number specified.

Note: Les composants identifiés par une trame et par une marque A sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.











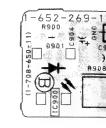
6

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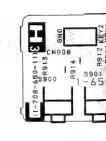




- H2 BOARD

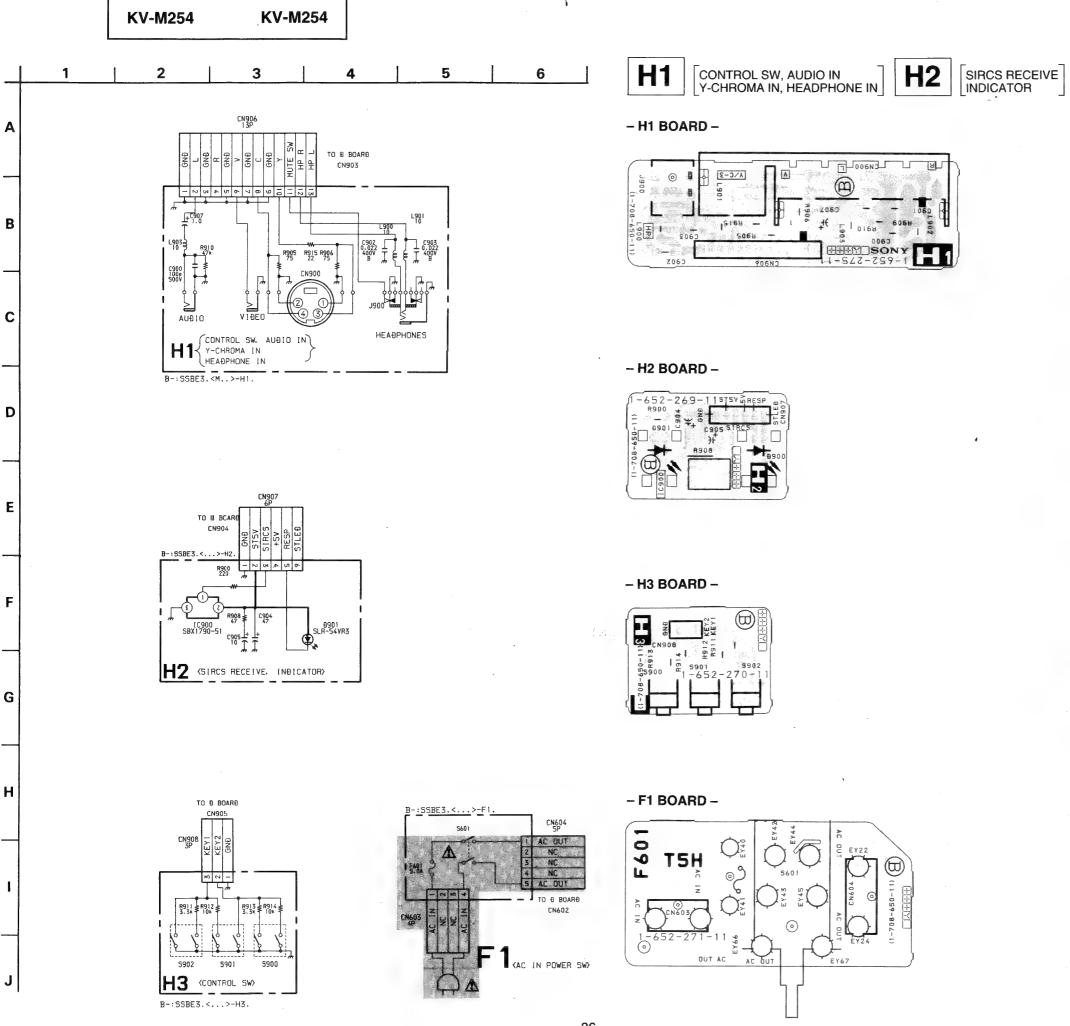


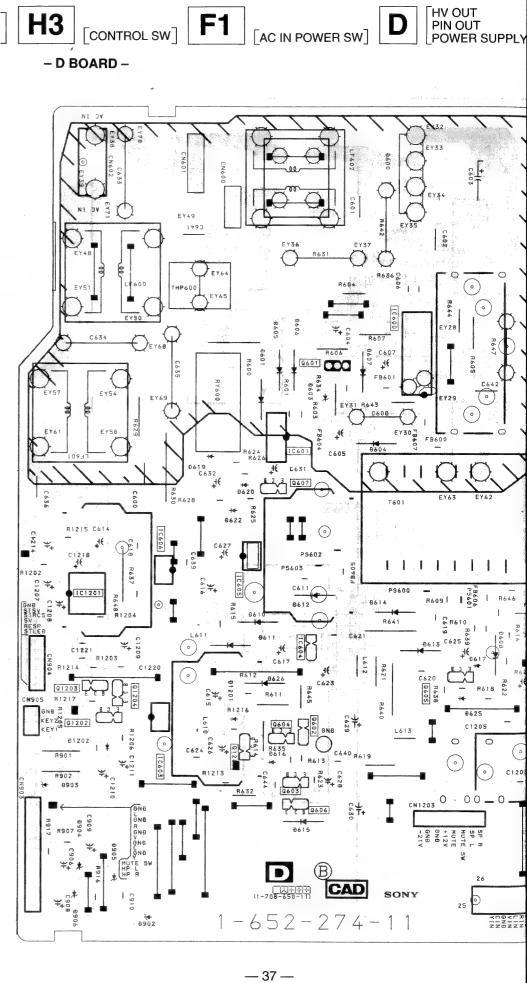
- H3 BOARD



- F1 BOARD







NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

H2 SIRCS RECEIVE INDICATOR

H3

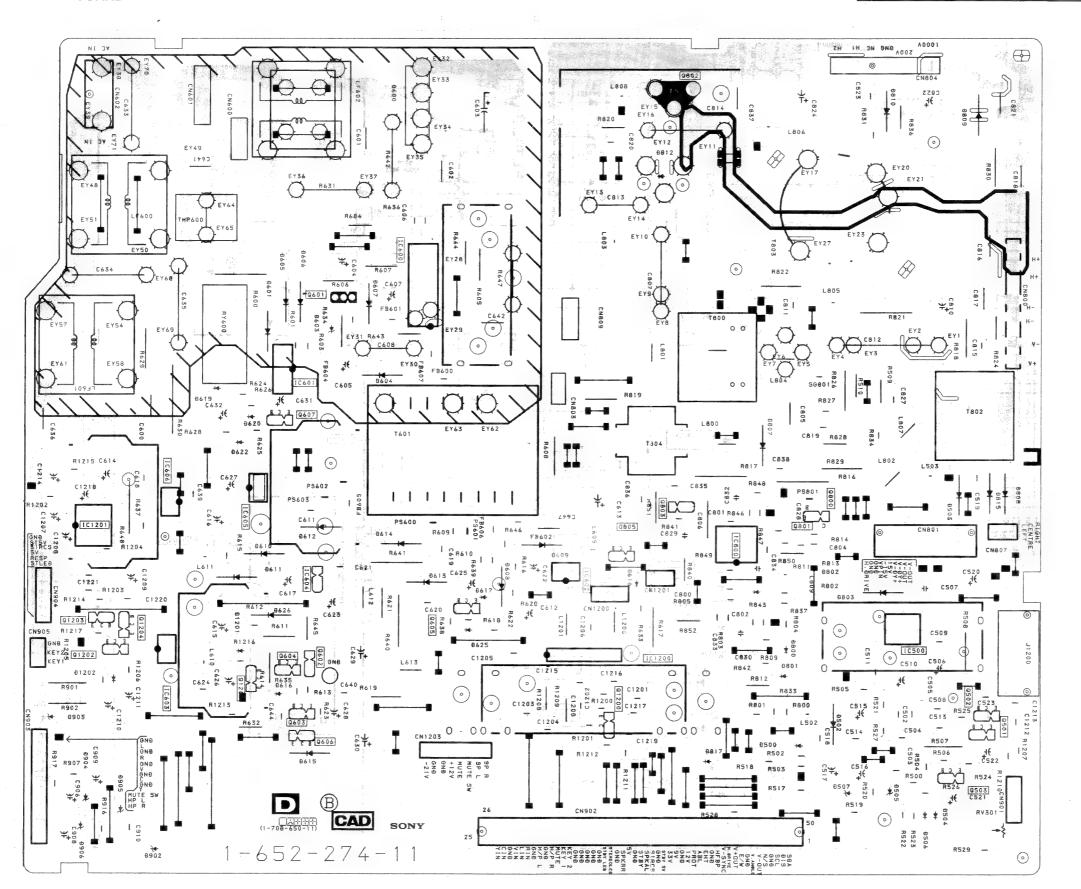
[CONTROL SW]

F1 [AC II

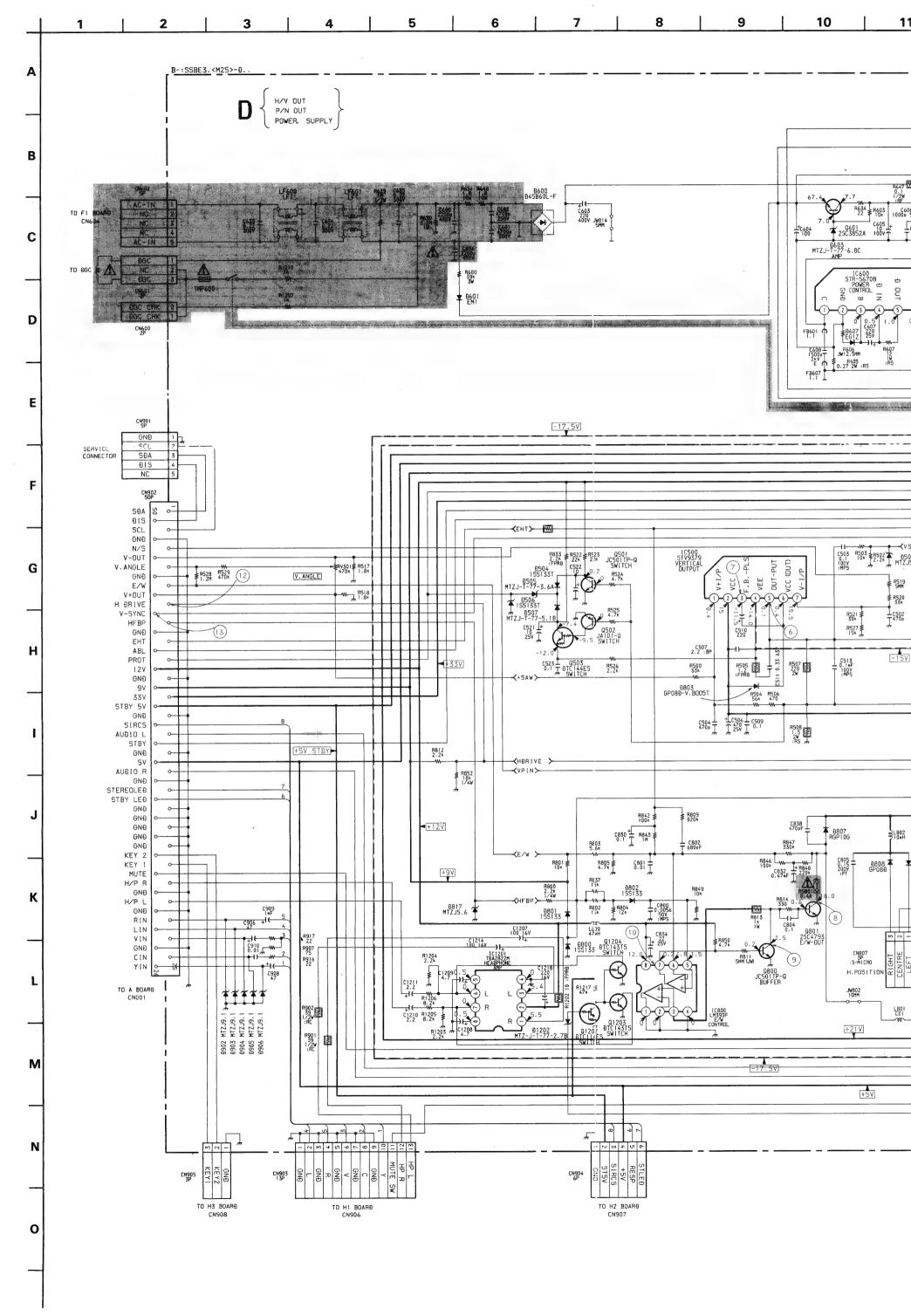
[AC IN POWER SW]

D HV OUT PIN OUT POWER SUPPLY

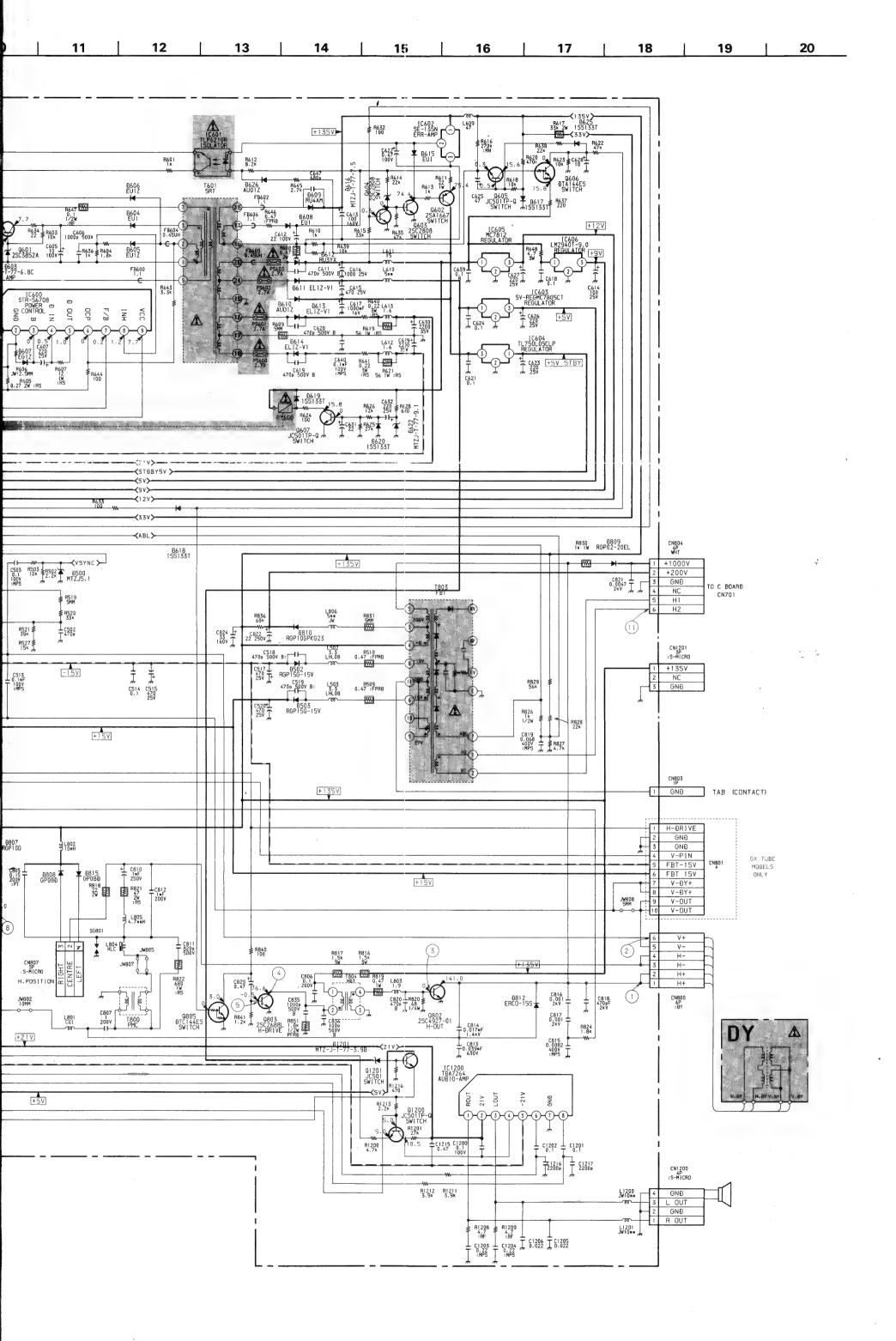
- D BOARD -



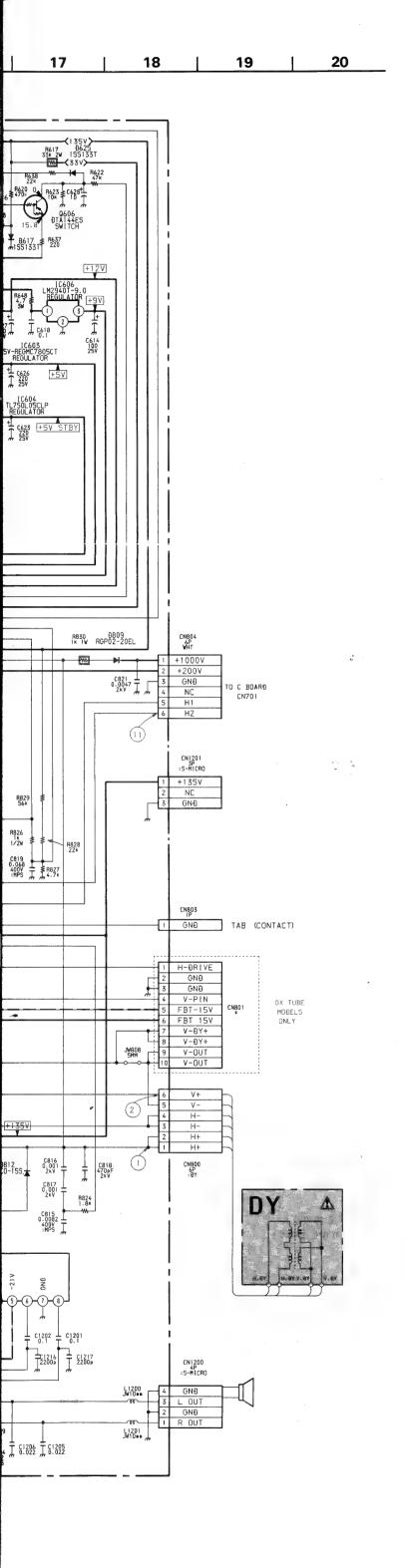
IC		D600	A - 4
IC500	G - 10	D601	C - 3
IC600	C - 5	D603	D - 4
IC600	D - 4	D604	D - 4
IC601	F - 7	D605	C - 3
IC602	H-2	D606	C - 4
IC603	F - 4	D607	C - 4
IC604	F-4 F-3	D608	F-6
	E-2	D609	F-6
IC606 IC800	F-8	D610	F-3
IC1200	G-7	D611	F-3
IC1200	G - 7 F - 1	D612	F-4
101201	F - 1	D613	F-5
TRANSISTOR		D614	F-4
MANUSTON		D615	H - 4
Q501	H - 11	D616	G - 3
Q502	H - 11	D617	F-5
Q503	I - 11	D618	F - 7
Q601	C - 4	D619	D - 2
Q602	G - 4	D620	E - 3
Q603	H - 3	D622	E - 3
Q604	G - 3	D625	G - 5
Q605	G - 5	D626	G - 3
Q606	H - 4	D800	G - 9
Q607	E - 4	D801	G - 9
Q800	E - 9	D802	F-9
Q801	F-9	D803	F-9
Q802	A - 8	D807	E - 9
Q803	F - 7	D808	E - 11
Q805	F - 7	D809	A - 11
Q1200	H - 7	D810	A - 10
		D812	B - 7
DIODĖ		D815	E - 11
D500	G - 9	D817	H - 8
D502	G - 9	D902	1-2
D503	F - 10	D903	H - 1
D504	1 - 10	D904	H - 1
D505	I - 10	D905	H - 2
D506	1 - 10	D906	ł - 1
D507	G - 9		



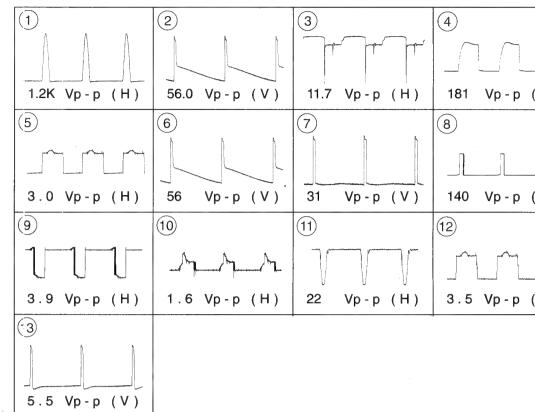
- 39



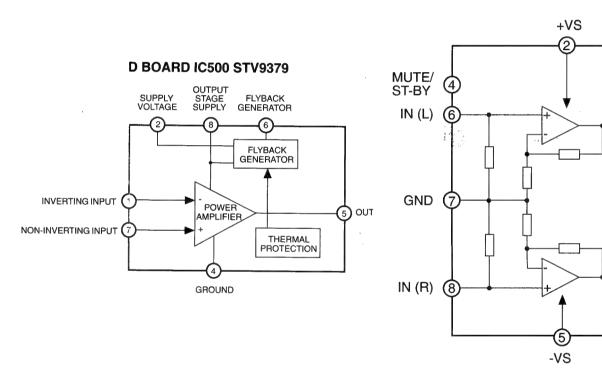
- 40 -



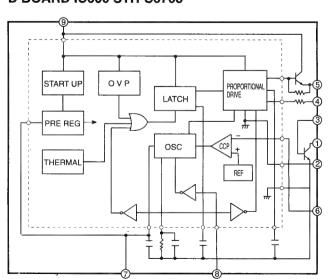
### **WAVEFORMS D BOARD**



### D BOARD IC1200 TDA7



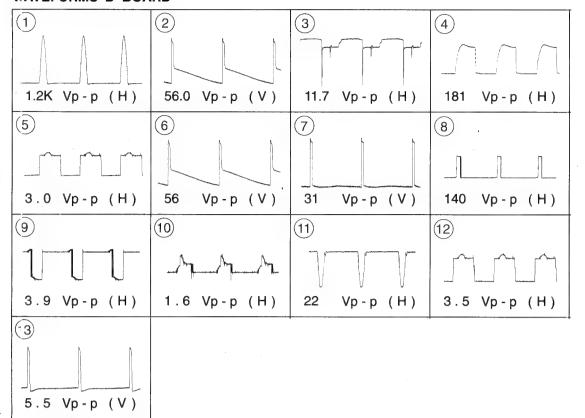
# D BOARD IC600 STR-S6708



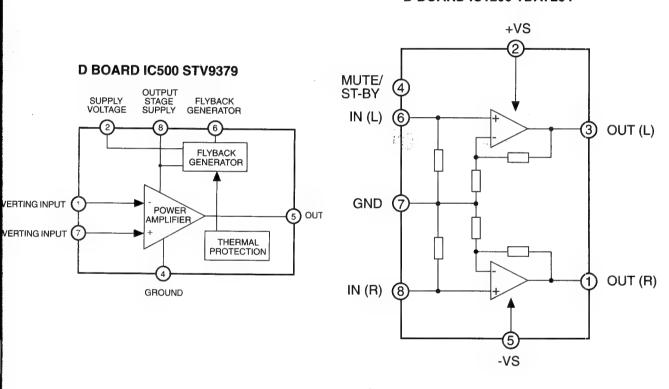
— 41 —

f

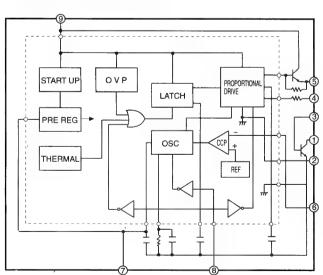
### WAVEFORMS D BOARD

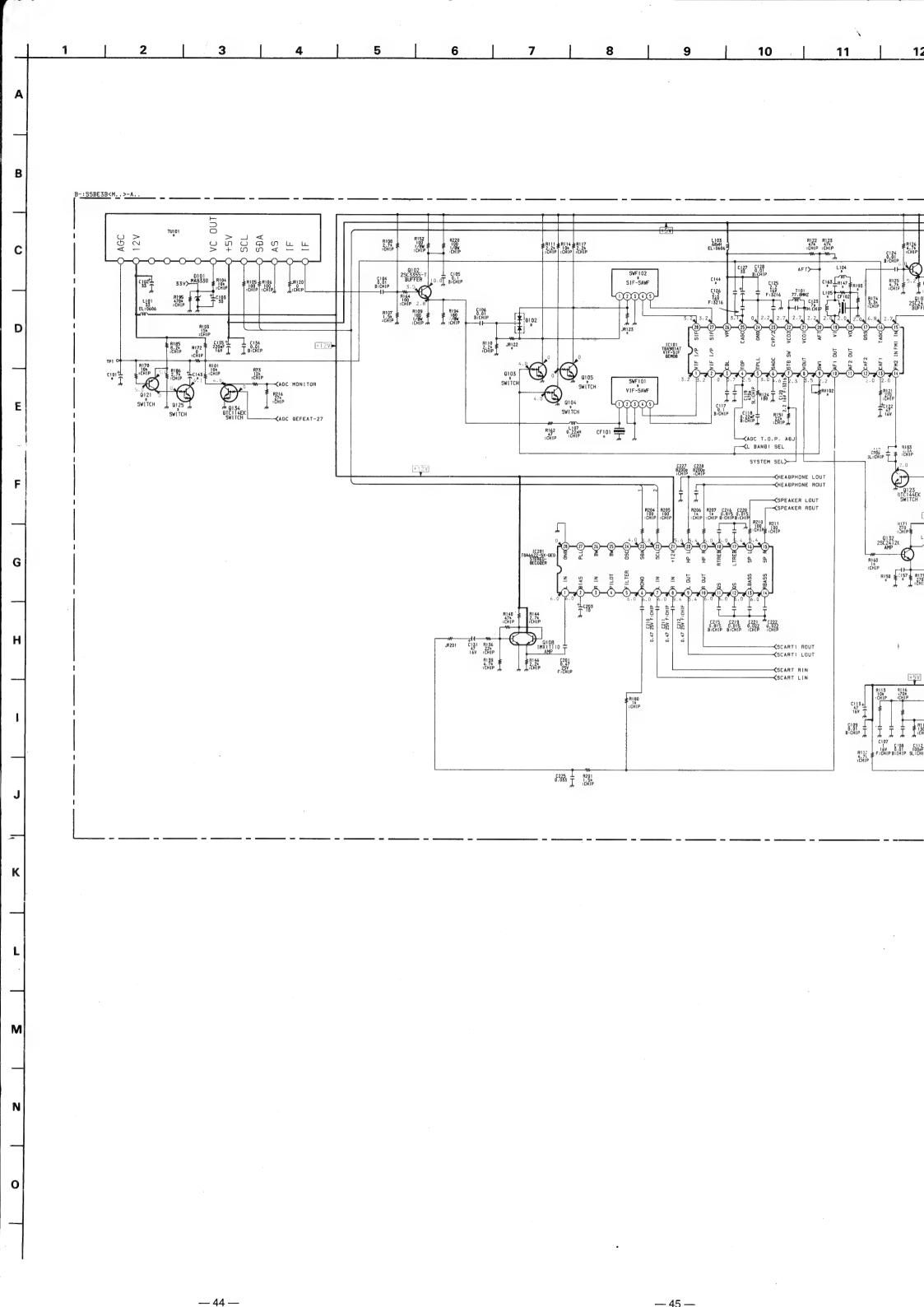


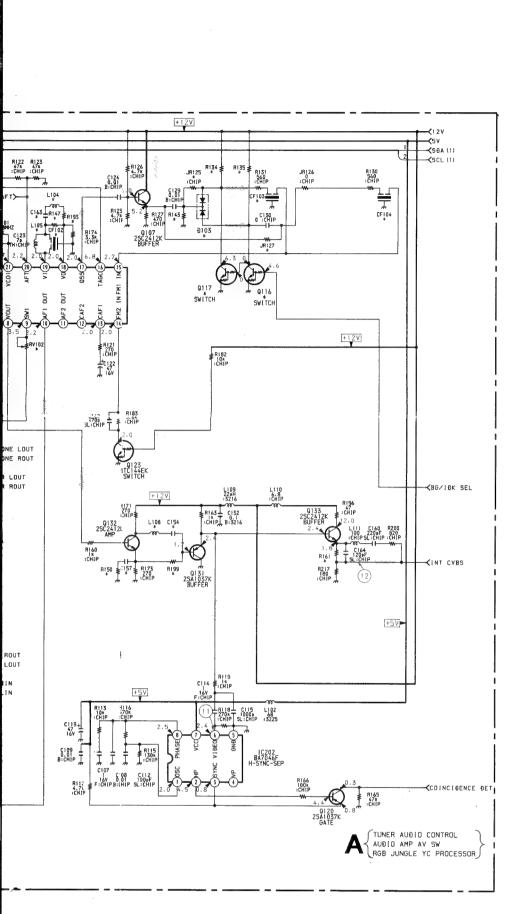
## **D BOARD IC1200 TDA7264**



# D BOARD IC600 STR-S6708



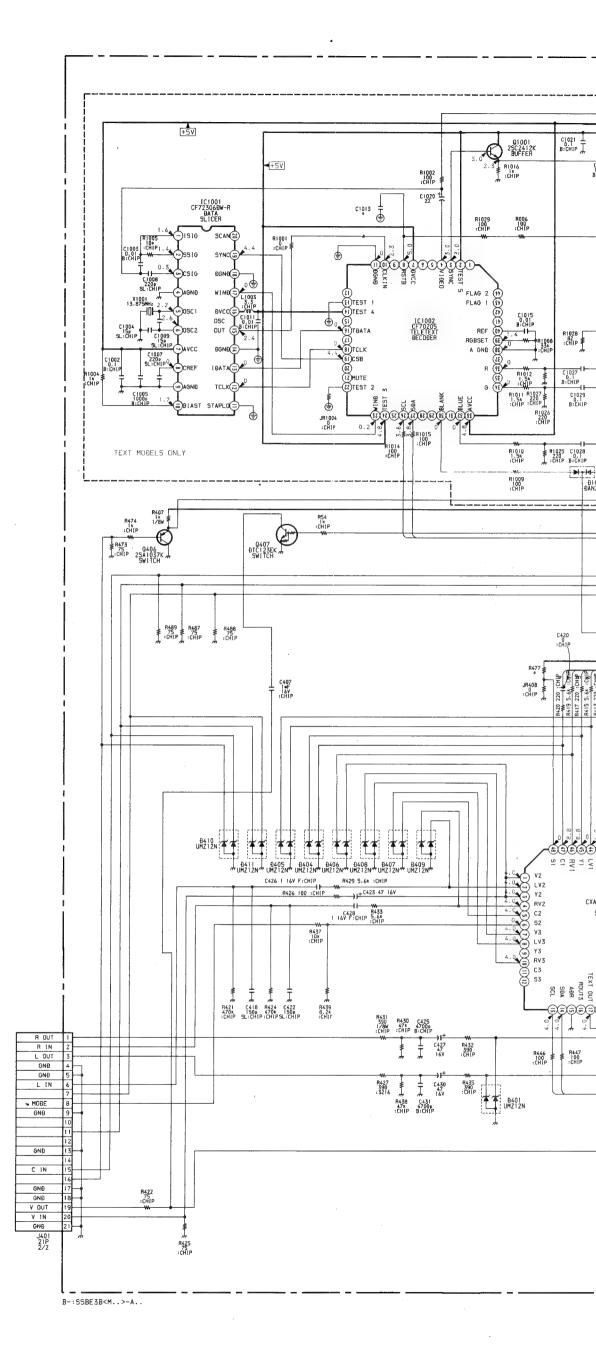


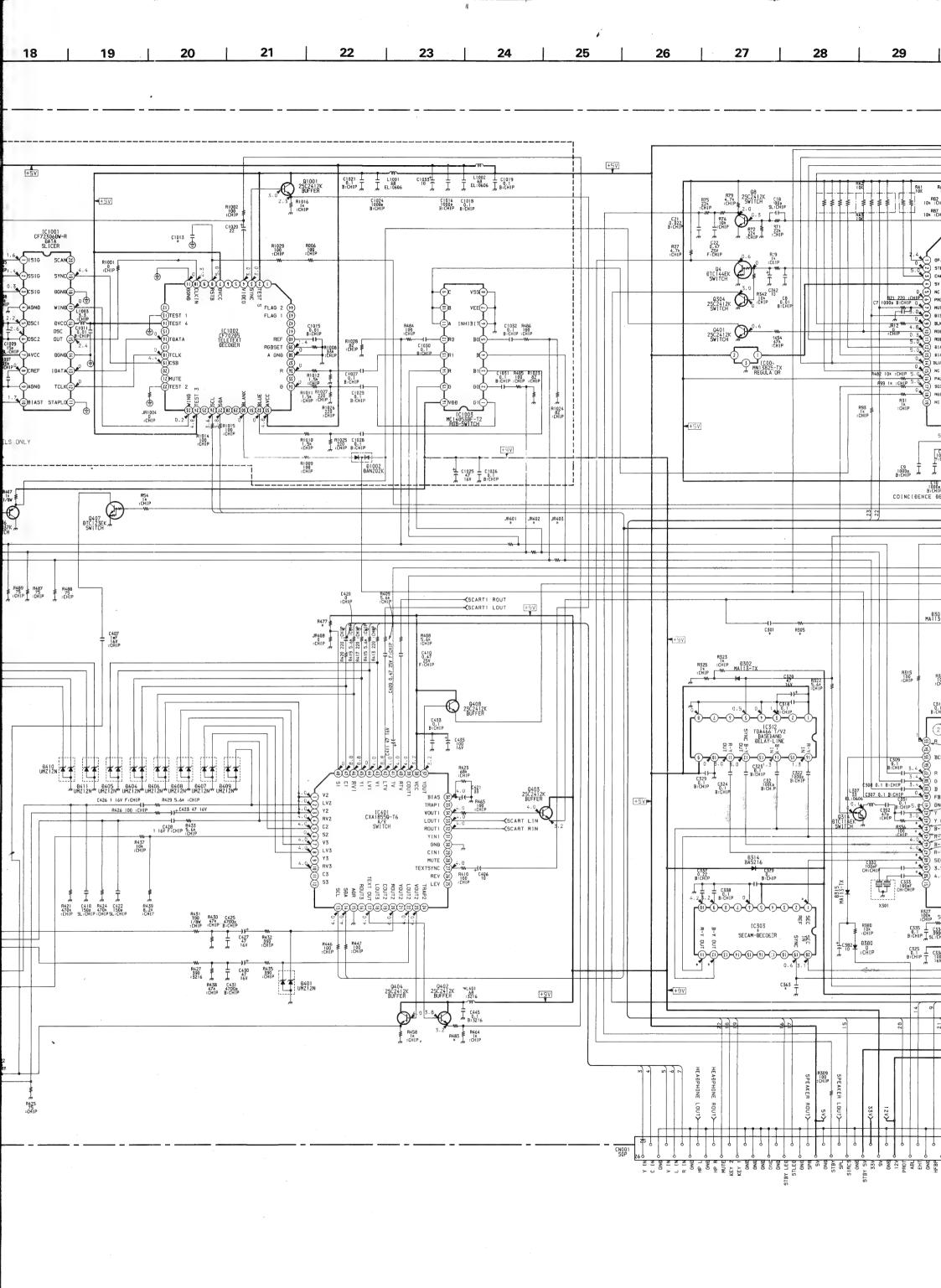


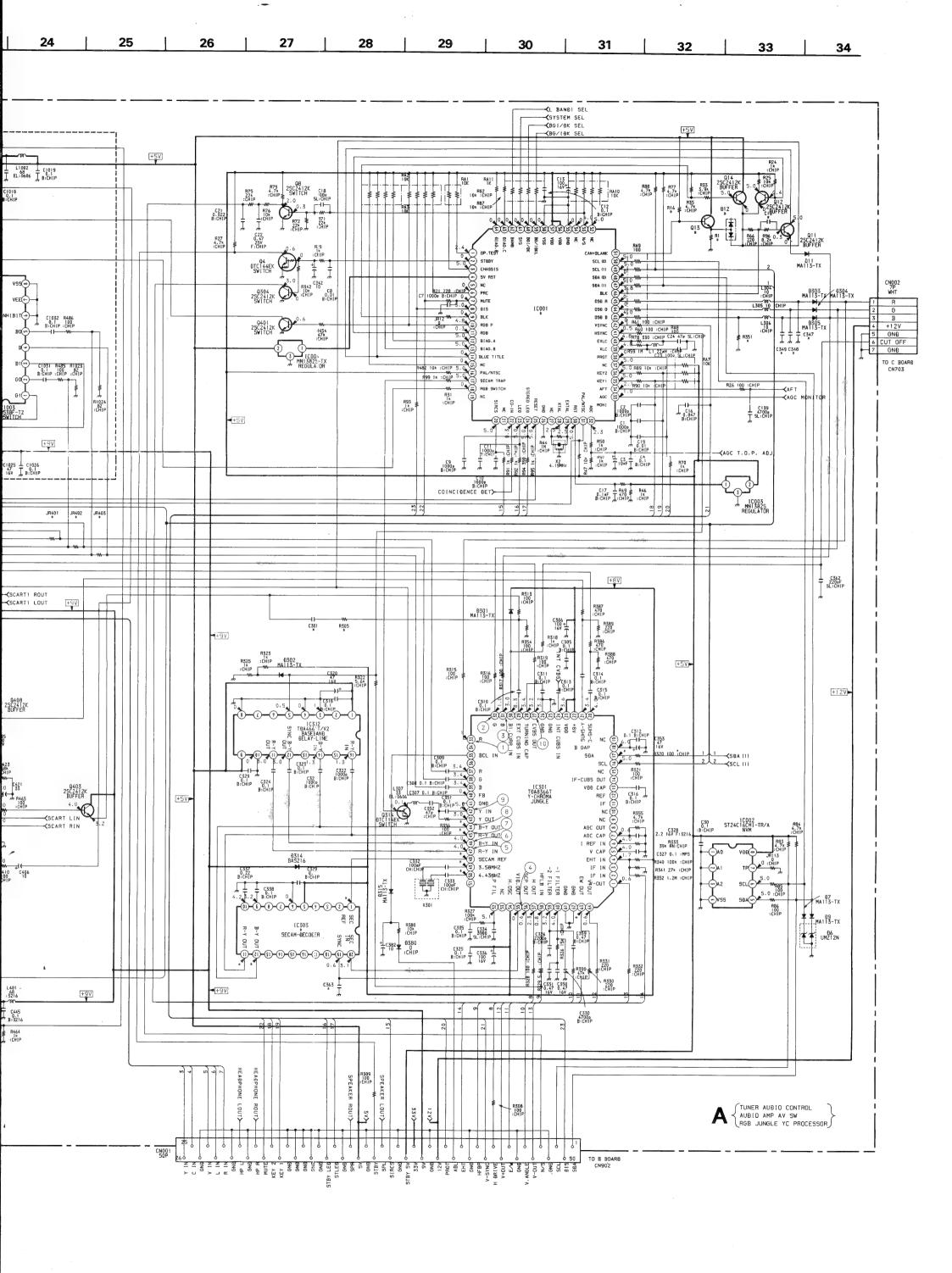
Voltages indicated with the mark  $\,$  on the schematic diagram are shown in the table below.

# A BOARD

IC	Pin	PAL	SECAM	NTSC	NTSC ,
	""		JECAIVI	3.58	4.43
IC301	17	4.0	4.0	4.0	0
	35	3.6	2.5	3.5	3.5
	44	1.5	3.1	1.5	1.5
	45	1.5	3.0	1.5	1.5
	48	1.7	4.4	1.6	1.7
	49	1.4	1.4	2.0	1.4
	50	2.0	2.0	1.4	2.0
	ස	3.4	2.5	2.2	2.5
IC303	1	1.7	4.4	1.6	1.7
	11	1.5	3.0	1.5	1.5
	12	1.5	3.1	1.5	1.5







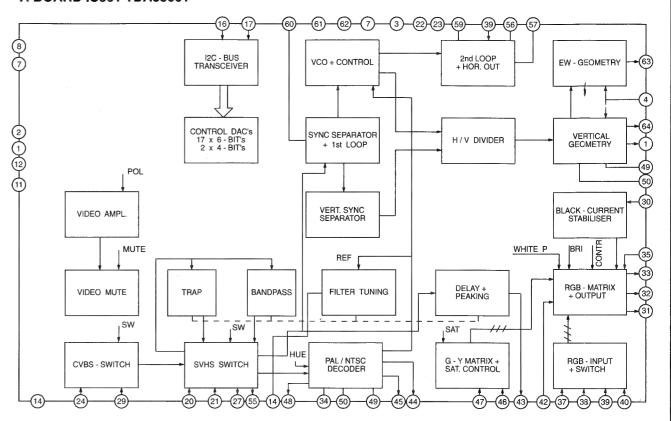
### KV-M254

### KV-M254

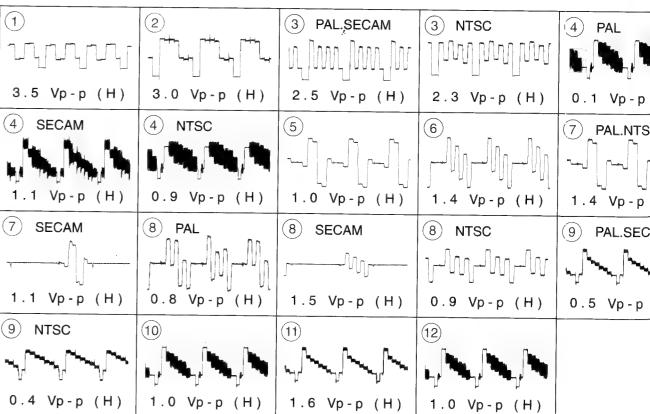
### A BOARD \* MARK

Model	M2541A	M2540B	M2540D	M2541D	M2540E	M2541E	M2540K	M2541K	M2541L	M2541U
C15	33PF	33PF	33PF	33PF	-	-	-	-	33PF	33PF
C101	22UF	4.7UF	22UF							
C143	-	100UF	-	-	-	-	-	-	-	-
C144	-	1UF	-	-	-	-	-	-	-	-
C154	180PF	33PF	180PF	180PF	180PF	180PF	180PF	180PF	47PF	47PF
C157	68PF	68PF	68PF	120PF	68PF	68PF	68PF	68PF	100PF	100PF
C163	-	1000PF	-	-	-	-		-	-	-
C301	-	-	-	-	-	-	-	-	470PF	470PF
C347	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
C348	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
C349	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
C355	47PF	68PF	68PF							
C363	22PF	-	-							
C1013	1MF	-	-	1MF	-	-	-	-	1MF	1MF
CF101	-	EFCV4045A4	-	-						
CF102	5.5MHZ	6.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	6.0MHZ	6.0MHZ
CF103	5.5MHZ	-	-							
CF104	-	6.0MHZ	6.5MHZ	6.5MHZ	-	-	6.5MHZ	6.5MHZ	6.0MHZ	6.0MHZ
CF109	TRAP	TRAP	TRAP	TRAP	-	-	- '	-	-	-
D12	-	MA715-TX	-	-	-	MA715-TX	-	-	-	-
D102	-	DAN202K	-	-	-	-	-	-	-	-
D103	-	DAN202K	DAN202K	DAN202K	-	-	DAN202K	DAN202K	-	-
IC001	CXP85228-113Q	CXP85228-112Q	CXP85228-112Q	CXP85228-112Q	CXP85228-113Q	CXP85228-113Q	CXP85228-112Q	CXP85228-112Q	CXP85228-113Q	CXP85228-113Q
IC303	-	TDA8395T	TDA8395T	TDA8395T	-	-	TDA8395T	TDA8395T	-	-
JR122	' 0	-	0	0	0	0	0	0	0	0
JR123	0	-	0	0	0	0	0	0	0	0
JR125	0	-	-	-	0	0	-	-	-	-
JR127	-	-	-	-	-	-	-	-	0	0
JR401	-	0	0	-	0	-	0	-	-	-
JR402	-	0	0	-	0	-	0	-	-	-
JR403	-	0	0	-	0	-	0	-	-	
L104	-	100UH		-	-	-	-	-	-	-
L105	15UH	5.6UH	15UH							
L108	10UH	27UH	10UH							
Q13	-	2SC2412K	§ -	-	-	2SC2412K	-	-	-	-
Q103	-	DTC114EK	-	-		-	-	-	-	-
Q104	*	DTC114EK	-	-	-	-	-	-	-	-
Q105	-	DTC114EK	-	-	-	-		-	-	
Q116	-	DTC144EK	DTC144EK	DTC144EK	-	-	DTC144EK	DTC144EK	-	-
Q117	-	DTC144EK	DTC144EK	DTC144EK	-	-	DTC144EK	DTC144EK	-	-
Q121	-	2SA1162-G	-	-	-	-	-	-	-	-
Q125	-	DTC114EK	-	-	-	-	-	-	-	-
R1	-	1K	-	-	-	-	-	-	-	-
R16	-	1K	-	-	-	-	-	-	-	-
R134	-	2.2K	2.2K	2.2K	-	-	2.2K	2.2K	-	-
R135	-	2.2K	2.2K	2.2K	-	-	2.2K	2.2K	-	-
R143	-	2.2K	2.2K	2.2K	-	-	2.2K	2.2K	-	-
R147	220	180	220	220	220	220	220	220	330	330
R150	0	0	0	0	0	0	0	0	1.5K	1.5K
R161	180	180	180	- 180	180	180	180	180	820	820
R193	-	1K	-	-	-	-	-	-	-	-
R199	330	1.2K	330	330	330	330	330	330	1K	1K
R305	-	-	-	-	-	-	-	-	1K	1K
R351	6.8K	6.8K	6.8K	6.8K		-	-	-	6.8K	6.8K
R365	100	100	100	100	100	100	100	100	120	120
R477	-	-	-	-	-	-	-	-	5.6K	5.6K
R483	1.2K	820	820							
RV102	-	22K	-	-	-	-	-	-	-	-
SWF101	K3953M	J3950M								
SWF102	K9350M	K9453M	K9350M							
TU101	UV-916H	U-944C								
	0.01011	0.01011	0 7 0 1011	0 0 0 10 1	04-91011	04-31011	04-3100	O 4-9 10 I	OA-810U	U-944U

### A BOARD IC301 TDA8366T



### **WAVEFORMS A BOARD**



- A BOARD -

EW - GEOMETRY

BLACK - CURRENT STABILISER

> RGB · MATRIX + OUTPUT

> > (4) PAL

0.1 Vp-p (H)

1.4 Vp-p (H)

9 PAL.SECAM

0.5 Vp-p (H)

7 PAL.NTSC

47-46-43-42-37-33-39-40-

DIVIDER

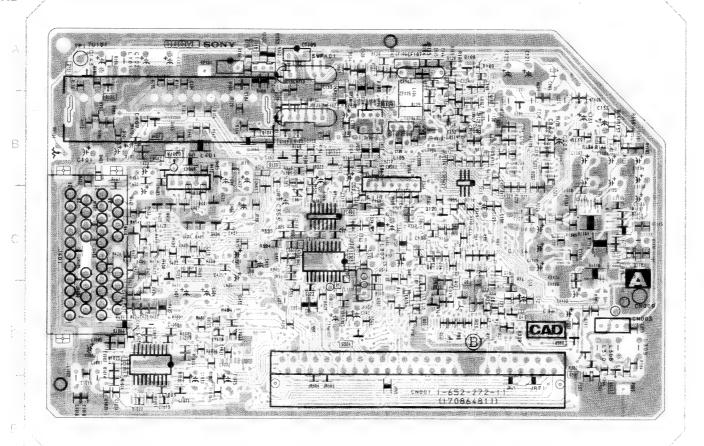
NTSC

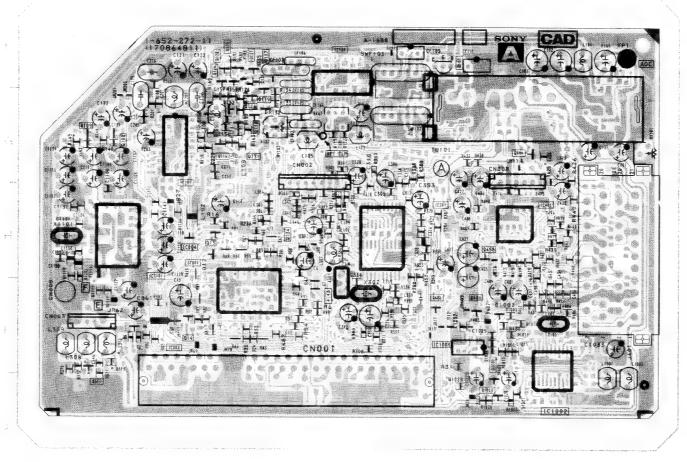
3 Vp-p (H)

4 Vp-p (H)

9 Vp-p (H)

Vp-p (H)

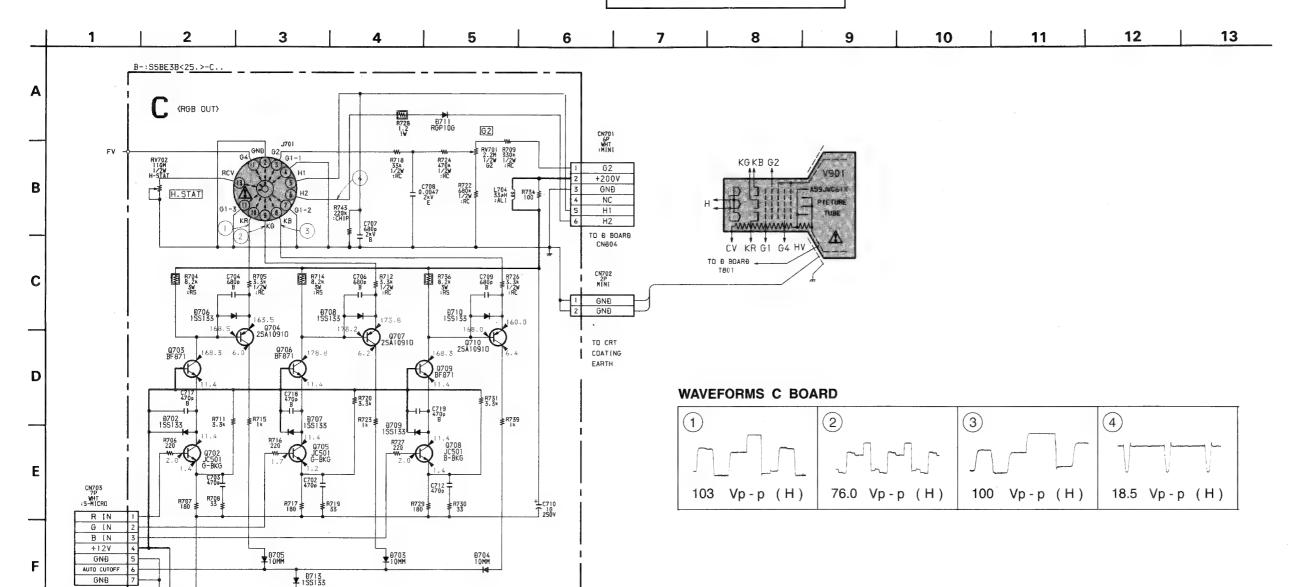




	IC	Q313	J - 1
IC001	H - 2	Q314	C - 4
IC002	1-2	Q380	D-6
IC101	F - 4	Q38	D - 6
IC201	G - 2	Q401	1-5
IC202	B - 5	Q402	B - 2
IC301	H - 5	Q403	B - 3
IC302	C - 4	Q404	G - 6
IC303	C - 4	Q1001	I - 6
IC401	H - 6	Q1003	J - 5
IC1001	D - 2		
IC1001	J - 6	D	IODE
IC1002	l - 5	D6	1-2
IC1101		D7	1 - 2
101101	11-2	D9	1-2
TRAN	ISISTOR	D11	D - 5
		D101	B - 2
Q4	D - 6	D102	B - 4
Q8	C - 5	D103	A - 5
Q11	D - 5	D201	B - 6
Q12	C - 5	D301	G - 4
Q14	I - 2	D302	C - 4
Q102	F - 5, A - 3	D303	H - 3
Q103	B - 3	D304	B - 5
Q104	B - 3	D305	C - 4
Q105	B - 3	D314	B - 3
Q107	B - 5	D380	1 - 4
Q108	G - 2	D401	C - 2
Q109	G - 1	D402	C - 2
Q114	G - 3	D404	C - 2
Q116	G - 3	D405	C - 2
Q117	F-3	D406	C - 2
Q120	C - 5	D407	C - 2
Q121	A - 1	D408	C-2
Q123	B - 4	D409	C - 2
Q124	F-3	D410	C-2
Q125	B - 1	D411	D - 2
Q130	B - 3	D1002	I - 6
Q131	G - 3	D1003	J - 6
Q132	G - 3	D1101	H - 1
Q133	B - 4	D1102	C - 7
Q304	D - 4		
Q312	E - 7		-
		L	

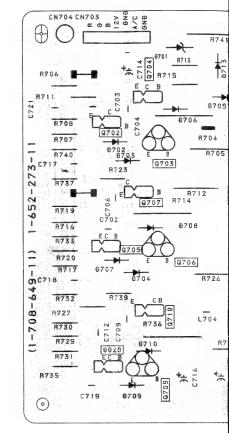
#### Note:

- · : Pattern from the side which enables seeing.
- Pattern of the rear side.





# - C BOARD -



₹ MTZJ9.1C

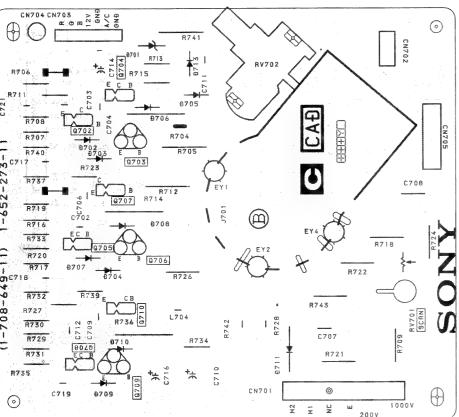
+ 6716 T 160

TO A BOARD

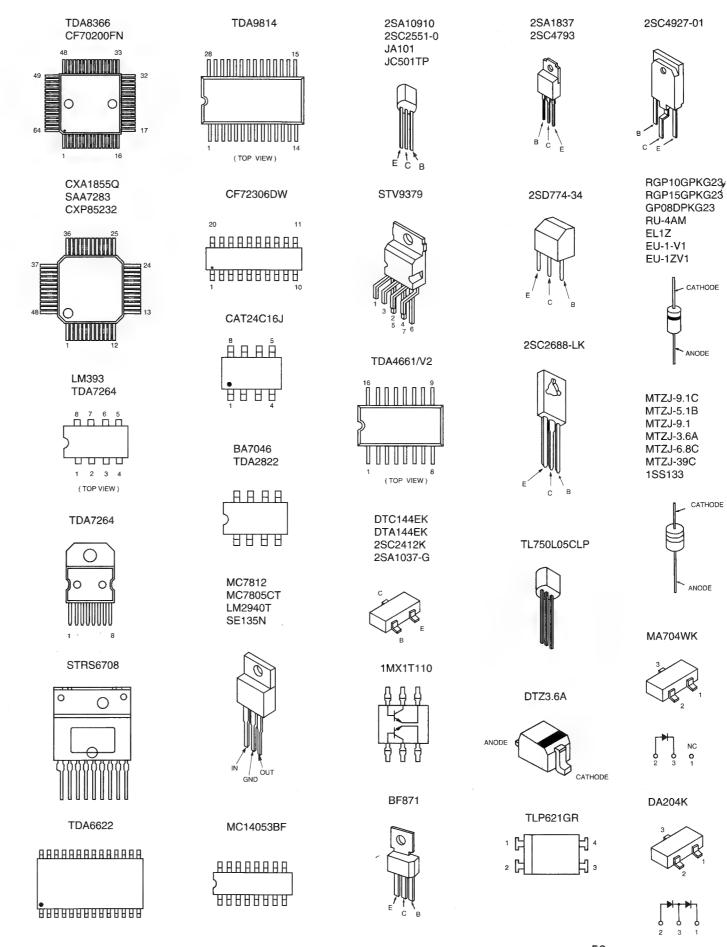
G



# C BOARD -



### **5.4 SEMICONDUCTORS**



UMZ12N

MA8039

MA113

SLR-54VR3

ANODE '

## **SECTION 6**

# **EXPLODED VIEWS**

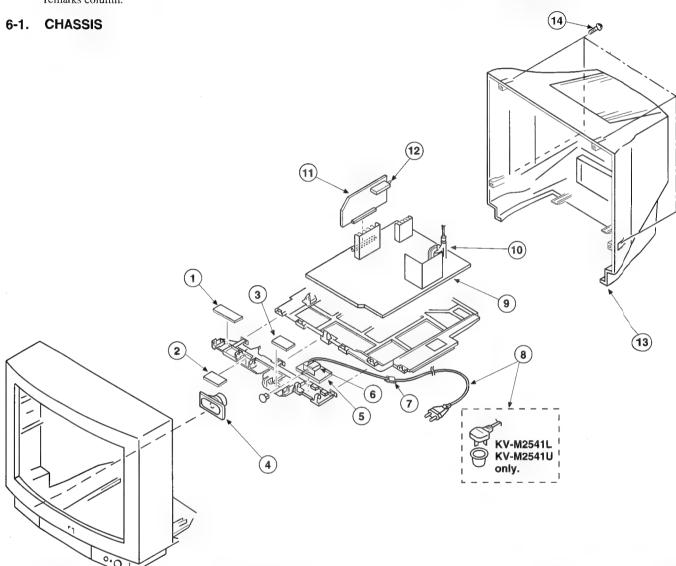
### NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.

Items marked "\* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

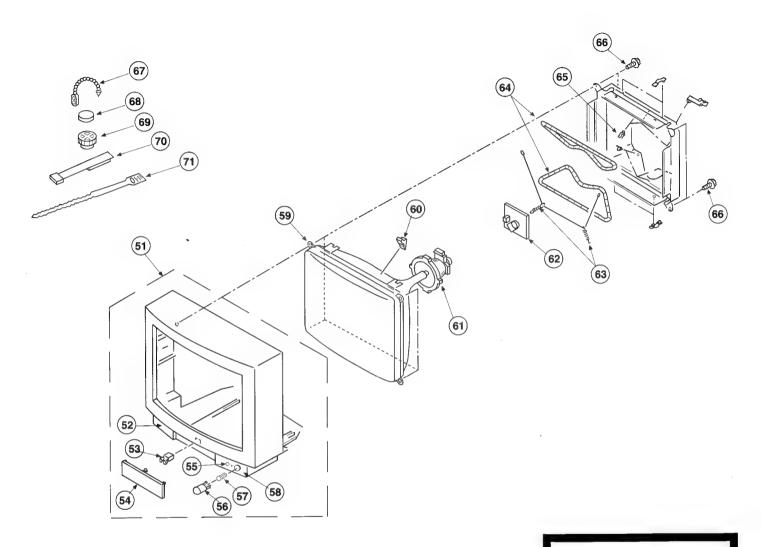
The components identified by shading and marked is are critical for safety.

Replace only with the part number specified.



		V					
REF NO	PART NO	DESCRIPT	TON REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	*1-652	2-275-11	H1 BOARD	10	1-453-169-11	FBT ASSY (UX1604A2)	
2	*1-652	2-270-11	H3 BOARD	11	*A-1632-239-A	A BOARD, COMPLETE ()	V- <b>M</b> 2541A)
3	*1-65	2-269-11	H2 BOARD		*A-1632-240-A	A BOARD, COMPLETE (	V-1M2540B)
4	1-504	4-698-11	SPEAKER		*A-1632-236-A	A BOARD, COMPLETE (	V-1M2540D)
5	*1-652	2-271-11	F1 BOARD		*A-1632-235-A		
6	1-57	1-433-11	SWITCH, ROSH (AC POWER)		*A-1632-226-A	A BOARD, COMPLETE (	V- <b>M</b> 2540E)
19.4	4-38	9-201-11	HOLDER, AC CORD		*A-1632-202-A		v- <b>m</b> 2541E)
Ü	∆ 1-75	1-680-11	CORD, POWER (WITH NOISE FILTER)		*A-1632-230-A		v- <b>M</b> 2540K)
			(EV-M2541A/M2540D/M254	1D)	*A-1632-229-A	A BOARD, COMPLETE (	√- <b>1</b> M2541K)
3.50	A 1-59	0-460-11	CORD, POWER (NITH CONNECTOR)		*A-1632-241-A	A BOARD, COMPLETE ()	√- <b>M</b> 2541L)
		Ar gr	(NY-M2540B/M2540E/M2541E/M2540K/M254	1K)	*A-1632-211-A		y- <b>M</b> 2541U)
0.0	3 in 1-590	0-762-11	CORD, POWER (WITH PLUG)	12	1-693-185-11		25 <b>4</b> 1A/M2540B/
70	200 - 7500		(KV-M2541U/M254	14)		M2540D/M2541D/I	25 40E/M2541E/
9	*A-16	42-121-A	D BOARD, COMPLETE (KV-M2541A/M2540B/			M2541L/M2540K/)	
			M2540D/M2541D/M2540E/M2541E/		1-693-184-11	TUNER (U944C) (KV-M	5 <b>4</b> 10)
			M2540K/M2541K)	13	4-202-835-01	COVER, REAR	
	*A-16	42-134-A	D BOARD, COMPLETE (KV-M2541L/M2541U)	14	4-039-358-01	SCREW (4x16), (+) B7	T_APPING

### 6-2. PICTURE TUBE



The components identified by shading and marked  $\mathcal{X}$  are critical for safety. Replace only with the part number specified.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-172-2	BEZNET ASSY	52-58	62	*A-1638-052-A	C BOARD, COMPLETE	
52	4-202-833-01	FRAME, SPEAKER				(KV-M2541A/M2540B/	
53	4-392-036-01	•				M2540E/M2541E/	M2540K/M2541K)
54	4-202-831-01	_			*A-1638-045-A	C BOARD, COMPLETE	
55	4-202-830-01					(KV-	M2541L/M2541U)
56	4-202-834-01			63	4-303-774-11	SPRING, GROUND WIRE	this are belief and dependent of the same and a restrict of the same and
57	4-329-112-00	-		- 64	A 1-402-746-11	COIL, DEGAUSSING	
58	4-202-832-21		-M2541A)	65	4-385-916-01	HOLDER (D)	
	4-202-832-01			66	4-036-188-01	SCREW (M), PT	
		(KV-M2540B/M2540D	/M2540E/M2540K)	67	4-308-870-00	CLIP LEAD WIRE	
	4-202-832-11	WINDOW, ORNAMENTAL		68	1-452-032-00	MAGNET, DISK; 10MMØ	
		(KV-M2541D/M2541E/M2541K	/M2541L/M2541U)	69	1-452-094-00	MAGNET, ROTATABLE D	ISK; 15MMØ
59.	* 8-733-231-05	CRT SD-178 (A59JWC61X)		70	X-4387-214-1	PERMALLOY ASSY, COR	RECTION
60	3-704-495-01	Control of the Contro		71	3-701-007-00	BAND, BINDING	
61		DEPLECTION VOLK (Y25FX					

# **ELECTRICAL PARTS LIST SECTION 7**

The components identified by shading and marked 1 are critical for safety.

Replace only with the part number specified.

Items marked "\* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

### **RESISTORS**

- All resistors are in ohms
- F · nonflammable

When indicating parts by reference number, please include the board name.

**CAPACITORS** 

**COILS** 

MF: mF, PF: mmF

MMH: mH,  $\mu H$ : mH





		•	F: nonflammal	ble					/ 1
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	DN		REMARK
	*1-652-271-11	F1 BOARD		C12	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
	< CON	NECTOR >		C13 C15		ELECT CERAMIC CHIP A/M2540B/M2540		20% 5%	16V 50V
CN603 // CN604 //	A CONTRACTOR OF THE PARTY OF TH	PIN, COMMECTOR (POWER) PIN, COMMECTOR (POWER)		C16 C17	1-163-809-11	CERAMIC CHIP CERAMIC CHIP	0.047MF	10% 10% 10%	25V 25V
	< FUS	E >		C18 C19	1-163-117-00	CERAMIC CHIP CERAMIC CHIP		5% 10%	50V 50V
P501	2 1-576-232-21 1-533-230-11	FOSE (M.D.C.) DA 250V HOLDER, POSE (F601)		C21 C22 C23		CERAMIC CHIP CERAMIC CHIP	0.022MF 0.47MF	10%	25V 25V 25V 50V
	< SWI	TCH >		C24	1-163-109-00			5%	50V
2601 #		SMITCH PUSH (AC POMBR)	*******	C30 C101	1-164-004-11 1-124-916-11	CERAMIC CHIP	0.1MF 22MF	10% 20%	25V 50V
	*A-1632-239-A	A BOARD, COMPLETE (KV-M2541A	)		1-124-927-11		M2541K/M2		
		******************* A BOARD, COMPLETE (KV-M2540B			1 121 727 11	111101	4.7ML	(KV-M25	
		A BOARD, COMPLETE (KV-M2540D		C102 C103	1-124-917-11 1-124-917-11	ELECT	33MF 33MF	20% 20%	50V 50V
	*A-1632-235-A	A BOARD, COMPLETE (KV-M2541D	)	C104 C105 C106		CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF	10% 10% 10%	50V 25V 50V
		A BOARD, COMPLETE (KV-M2540E		C107	1-164-346-11	CERAMIC CHIP	1MF		16V
		A BOARD, COMPLETE (KV-M2541E		C108 C109	1-164-232-11 1-164-232-11	CERAMIC CHIP CERAMIC CHIP		10% 10%	50V 50V
	*A-1632-230-A	A BOARD, COMPLETE (KV-M2540K	)	C112 C113	1-163-117-00 1-124-477-11		100PF 47MF	5% 20%	50V 16V
	*A-1632-229-A	A BOARD, COMPLETE (KV-M2541K	)	C114	1-164-346-11	CERAMIC CHIP	1MF		16V
	*A-1632-241-A	A BOARD, COMPLETE (KV-M2541L	)	C115 C117	1-163-141-00 1-164-004-11	CERAMIC CHIP		5% 10%	50V 25V
	*A-1632-211-A	A BOARD, COMPLETE (KV-M2541U	)	C118 C119	1-164-489-11 1-163-133-00	CERAMIC CHIP CERAMIC CHIP		10% 5%	16V 50V
TP1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1	P	C120 C122	1-164-337-11 1-124-477-11	CERAMIC CHIP	2.2MF 47MF	20%	16V 16V
	< CAP	ACITOR >		C123 C124	1-163-090-00	CERAMIC CHIP	7PF	0.25 PF 10%	
C1 C2		CERAMIC CHIP 0.001MF 10% CERAMIC CHIP 0.001MF 10%		C125		CERAMIC CHIP		100	16V
C3 C4	1-124-907-11	ELECT 10MF 20%	50V	C126	1-164-337-11	CERAMIC CHIP		0.00	16V
C7		CERAMIC CHIP 0.1MF 10% CERAMIC CHIP 0.001MF 10%		C127 C128 C129	1-124-917-11 1-164-232-11 1-164-232-11	CERAMIC CHIP	33MF 0.01MF	20% 10% 10%	50V 50V 50V
C8 C9		CERAMIC CHIP 0.01MF 10% CERAMIC CHIP 0.001MF 10%		C130	1-216-295-91		0.01MF		1/10W
C10 C11	1-163-009-11	CERAMIC CHIP 0.001MF 10% CERAMIC CHIP 0.001MF 10%	50V	C131 C134	1-124-477-11 1-164-232-11	ELECT CERAMIC CHIP	47MF 0.01MF	20% 10%	16V 50V

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REF.NO.	PART NO.	DESCRIPTION	N	1	REMARK	REF.NO.	PART NO.	DESCRIPTIO	DN		REMARK
C135 C139	1-126-176-11 1-163-017-00	ELECT CERAMIC CHIP	220MF 0.0047MF	20% 10%	10V 50V	C327	1-136-165-00	FILM	0.1MF	5%	50 <b>V</b>
C142		CERAMIC CHIP		5%	50V	C328 C329	1-164-337-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP		10%	16V 25V
C143	1-126-101-11	ELECT	100MF	(KV-M25	16V 40B)	C330 C331	1-163-017-00 1-165-320-11	CERAMIC CHIP	0.47MF	10% 10%	50V 16V
C144	1-164-346-11	CERAMIC CHIP		(KV-M25	16V 40B)	C332	1-163-251-11	CERAMIC CHIP		5%	50V
C152	1-164-004-11	CERAMIC CHIP		10%	25V	C333 C334	1-163-251-11	CERAMIC CHIP	0.0039MF	5% 10% 10%	50V 50V 25V
C154	1-163-123-00 (KV-M2541A/M2	CERAMIC CHIP 540D/M2541D/M2	180PF 2540E/M2541E	5% /M2540K W25	50V / 41K)	C335 C336 C337	1-164-004-11 1-126-101-11 1-164-489-11	CERAMIC CHIP ELECT CERAMIC CHIP	100MF	20% 10%	16V 16V
	1-163-105-00	CERAMIC CHIP		5% (KV-M25	50V	C338	1-164-004-11	CERAMIC CHIP		10%	25V
	1-163-109-00	CERAMIC CHIP		5%	50V	C339 C342			10MF	10% 20%	25V 50V
C157	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	C346 C347	1-163-113-00		68PF	5% 5%	50V 50V
0107		CERAMIC CHIP		(KV-M25 5%	41D) 50V		(KV-M2541A 1-163-093-00	/M2540B/M2540 CERAMIC CHIP		41L/M25 5%	541U) 50V
	(KV-M2541A	/M2540D/M2540I CERAMIC CHIP	3/M2541E/M25	40K/M25 5%	41K) 50V			,	E/M2541E/M25		·
			(KV-M25		,	C348		/M2540B/M2540	D/M2541D/M25		
C160 C163	1-163-125-00 1-163-141-00	CERAMIC CHIP CERAMIC CHIP	0.001MF	5% 5%	50V 50V	a240	1-163-093-00 1-163-113-00	(KV-M2540	E/M2541E/M25	5% 40K/M25 5%	50V 541K) 50V
C164	1-163-119-00	CERAMIC CHIP	120PF	(KV-M25 5%	50V	C349	(KV-M2541A	/M2540B/M2540	D/M2541D/M25		
C201	1-164-005-11	CERAMIC CHIP		20%	25V 50V		1-163-093-00		E/M2541E/M25		
C203 C210	1-124-907-11 1-164-005-11	CERAMIC CHIP		20%	25V 25V	C350 C351	1-165-320-11 1-164-004-11			10% 10%	16V 25V
C211 C212	1-164-005-11 1-164-005-11	CERAMIC CHIP	0.47MF	4.00.	25V	C352	1-163-109-00	CERAMIC CHIP		5% 20%	50V 16V
C215	1-163-023-00	CERAMIC CHIP		10%	50V 50V	C353 C355	1-124-477-11 1-163-109-00 (KV-M2541A/M2	CERAMIC CHIP	47PF	5%	50V
C216 C219	1-163-011-11 1-163-023-00	CERAMIC CHIP	0.015MF	10% 10%	50V 50V		1-163-113-00	CERAMIC CHIP	M25	40K/M25 5%	541K) 50V
C220 C221 C222	1-163-011-11 1-163-037-11 1-163-037-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.022MF	10% 10% 10%	25V 25V		1-103-113-00	CERAPIC CHIP	(KV-M25		
C225	1-130-489-00	FILM	0.033MF	5%	50V	C359 C361	1-164-005-11 1-124-907-11	CERAMIC CHIP	0.47MF 10MF	20%	25V 50V
C227 C228	1-163-020-00	CERAMIC CHIP	0.0082MF	10% 10%	50V 50V	C362 C363	1-163-125-00 1-163-101-00	CERAMIC CHIP CERAMIC CHIP	220PF	5% 5%	50V 50V
C301	1-163-020-00 1-163-113-00	CERAMIC CHIP	470PF	5% 541L/M25	50V	6303	(KV-M2541A/M2		2541D/M2540E		E/
C305	1-164-004-11	CERAMIC CHIP	,	10%	25V	C382	1-124-907-11		10MF	20%	50V
C306 C307	1-126-101-11 1-164-004-11		100MF 0.1MF	20% 10%	16V 25V	C383 C406	1-163-101-00 1-124-907-11		22PF 10MF	5% 20%	50V 50V
C308 C309	1-164-004-11 1-164-004-11	CERAMIC CHIP	0.1MF	10% 10%	25V 25V	C407 C409	1-164-346-11 1-164-005-11				16V 25V
C310	1-164-004-11			10%	25V	C410	1-164-005-11	CERAMIC CHIP			25V
C311 C312	1-164-004-11 1-164-004-11	CERAMIC CHIP	0.1MF 0.1MF	10% 10%	25V 25V	C411 C418	1-124-477-11 1-163-121-00	CERAMIC CHIP		20% 5%	16V 50V
C313 C314	1-164-004-11 1-164-004-11	CERAMIC CHIP	0.1MF	10% 10%	25V 25V	C420 C421	1-216-295-91 1-124-917-11	METAL GLAZE ELECT	0 33MF	5% 20%	1/10W 50V
C315		CERAMIC CHIP		10%	25V	C422	1-163-121-00	CERAMIC CHIE	150PF	5%	50V
C316 C318	1-164-004-11	CERAMIC CHIP	0.1MF 0.1MF	10% 10%	25V 25V	C423 C425	1-124-477-11 1-163-017-00	ELECT CERAMIC CHIE	47MF 0.0047MF	20% 10%	16V 50V
C320 C321	1-124-477-11		47MF	20% 10%	16V 50V	C426 C427	1-164-346-11 1-124-477-11	CERAMIC CHIE		20%	16V 16V
C322	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	C428	1-164-346-11	CERAMIC CHIE	1MF		16V
C323 C324	1-164-004-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP	0.1MF 0.1MF	10% 10%	25V 25V	C430 C431	1-124-477-11 1-163-017-00	CERAMIC CHIE		20% 10%	16V 50V
C325 C326	1-164-004-11	CERAMIC CHIP	0.1MF	10% 10%	25V 50V	C433 C435	1-164-004-11 1-126-101-11		0.1MF 100MF	10% 20%	25V 16V
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REF.NO.	PART NO.	DESCRIPTION	REI	MARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C445		CERAMIC CHIP 0.1MF	10% 25	5V	D102 D103		DIODE DAN202K (KV-M	(2540B/M2540D/
(		002 - C1033 > D/M2541E/M2541K/M2541L/M2	541U)		D301	8-719-041-97	M2541 DIODE MA113-TX	D/M2540K/M2541K)
C1002 C1003 C1004 C1005 C1007	1-164-232-11 1-163-097-00 1-163-009-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.01MF CERAMIC CHIP 15PF CERAMIC CHIP 0.001MF CERAMIC CHIP 220PF	10% 50 5% 50 10% 50	5V 0V 0V 0V 0V	D302 D303 D304 D305 D314	8-719-041-97 8-719-041-97 8-719-041-97	DIODE MA113-TX DIODE MA113-TX DIODE MA113-TX DIODE MA113-TX DIODE BAS216	
C1008 C1009 C1011 C1013	1-163-097-00 1-164-232-11	CERAMIC CHIP 220PF CERAMIC CHIP 15PF CERAMIC CHIP 0.01MF CERAMIC CHIP 1MF (KV-M2541A/M2541D/M2	5% 50 10% 50	0V 0V 0V 6V U)	D315 D380 D401 D404 D405	1-216-295-91 8-719-047-41 8-719-047-41	DIODE MA113-TX METAL GLAZE 0 DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146	5% 1/10W
C1015 C1016 C1018 C1019 C1020	1-163-009-11 1-164-004-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF ELECT 22MF	10% 50 10% 2! 10% 2!	0V 0V 5V 5V 0V	D406 D407 D408 D409 D410	8-719-047-41 8-719-047-41 8-719-047-41	DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146	
C1021 C1024 C1025 C1026 C1027	1-163-009-11 1-124-477-11 1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.001MF ELECT 47MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 50 20% 10 10% 25	5V 0V 6V 5V	D411 D1002		DIODE UMZ12N-T146 DIODE DAN202K	
C1028 C1029 C1030 C1031 C1032	1-164-004-11 1-164-004-11 1-164-004-11 1-164-004-11	CERAMIC CHIP 0.1MF	10% 25 10% 25 10% 25 10% 25 10% 25	5V 5V 5V 5V 5V	IC001	(KV-M2540B/M2 8-752-855-69 (KV-M2541A/M2 8-752-854-74 (KV-M2540E/M2 8-752-851-53	IC CXP85232-109Q-TL 540D/M2541K) IC CXP85232-110Q-TL	1
C1033	1-124-907-11	ELECT 10MF	20% 50	0V		(KV-M2541E)		
CF101	1-760-154-21 (KV-M2540B/M2	TRAP, CERAMIC 2540D/M2541D/M2540E/M2541	E/M2540K/ M2541H	<b>K</b> )	IC002 IC003 IC004 IC101 IC201	8-759-041-54 8-759-041-54 8-759-277-66		
CF102	(KV-M2541A/M2 1-409-430-11	TRAP, CERAMIC (5.5MHZ) 2540D/M2541D/M2540E/M25411 TRAP, CERAMIC (6.5MHZ) TRAP, CERAMIC (6.0MHZ) (KV-M2	M2541	)	IC202 IC301 IC302 IC303	8-759-251-56	IC TDA8366T IC TDA4661T/V2	12541K)
CF103		FILTER, CERAMIC 2540B/M2540D/M2541D/M2540		PP 1	IC401		IC CXA1855Q-T6	
CF104	1-567-100-00	FILTER, CERAMIC (KV-M25	540K/M2541L 40B/M2541L M2541C	<i>i</i>	(KV		001 - IC1003 > /M2541E/M2541K/M2541	L/M2541U)
CF109	1-760-154-21	TRAP, CERAMIC (KV-M2541) M2		-	IC1001 IC1002 IC1003	8-759-275-29	IC CF72306DW-R IC CF70205AFN-R IC HD14053BFP	
		NNECTOR >				< COI	L >	
CN001 CN002 CN003	*1-568-882-51 *1-568-879-11	CONNECTOR, BOARD TO BOAR PIN, CONNECTOR 7P PIN, CONNECTOR 4P	RD 50P		L1 L101 L102 L103	1-408-609-41	INDUCTOR CHIP 68UH	
D6		DDE > DIODE UMZ12N-T146			L104		INDUCTOR CHIP 100UH (KV-M2540B)	
D7 D9 D11 D12	8-719-041-97 8-719-041-97 8-719-041-97	DIODE MA113-TX DIODE MA113-TX DIODE MA113-TX DIODE MA113-TX COLOR MA715-TX (KV-M254)	0B/M2541E)		L105	1-408-411-00 (KV-M2541A/M2	INDUCTOR 15UH 540D/M2541D/M2540E/M	
D101		DIODE MA8330	,,			1-408-406-00		H



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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION		REMARK
L107	1-410-985-11	INDUCTOR CHIP 0.22UH		Q314		TRANSISTOR DTC		
L108	1-408-409-00 (KV-M2541A/M2	540D/M2541D/M2540E/M2541E/M		Q380 Q381	8-729-920-74 8-729-920-74	TRANSISTOR 2SC		
	1-408-414-00	M2541K/M2541I INDUCTOR 27UH	1/M23410)	Q401		TRANSISTOR 2SC		
		(KV-M2540B)		Q402 Q403		TRANSISTOR 2SC		
L109	1-412-010-41			Q404	8-729-920-74	TRANSISTOR 2SC	2412K-QR	
L110 L111	1-412-004-31 1-414-170-11			Q406	8-729-216-22	TRANSISTOR 2SA	L162-G	
L304	1-412-006-31	INDUCTOR CHIP 10UH		Q407	8-729-923-89			
L305	1-412-006-31	INDUCTOR CHIP 10UH		Q408 Q1001		TRANSISTOR 2SC		
L306	1-412-006-31				, DPC	SISTOR >		
L307 L308	1-408-609-41 1-408-424-00				\ REC	ISION >		
L309	1-408-424-00	INDUCTOR 180UH		JR3	1-216-296-91		) 5% ) 5%	1/8W
L310	1-408-407-00	INDUCTOR 6.8UH		JR8 JR9	1-216-295-91 1-216-295-91		5%	1/10W 1/10W
L401	1-410-214-31	INDUCTOR CHIP 68UH		JR10	1-216-295-91	METAL GLAZE	5%	1/10W
	< 7.10	01 - L1003 >		JR12	1-216-295-91	METAL GLAZE	) 5%	1/10W
(K		/M2541E/M2541K/M2541L/M254:	LU)	JR13	1-216-295-91		) 5% ) 5%	1/10W 1/10W
L1001	1-408-419-00	INDUCTOR 68UH		JR14 JR15	1-216-295-91 1-216-295-91		0 5% 0 5%	1/10W 1/10W
L1002	1-408-419-00	INDUCTOR 68UH		JR16	1-216-295-91	METAL GLAZE	5%	1/10W
L1003	1-410-999-11	INDUCTOR CHIP 3.3UH		JR17	1-216-295-91	METAL GLAZE	0 5%	1/10W
	< COI	ïL >		JR18	1-216-295-91 1-216-295-91		0 5% 0 5%	1/10W 1/10W
T101	1-403-686-11	COIL		JR19 JR28	1-216-296-91		0 5%	1/8W
				JR51 JR52	1-216-296-91 1-216-295-91	METAL GLAZE	0 5% 0 5%	1/8W 1/10W
		NSISTOR >					•	
Q4 Q8	8-729-901-01	TRANSISTOR DTC144EK TRANSISTOR 2SC2412K-QR		JR55 JR56	1-216-296-91 1-216-296-91		0 5% 0 5%	1/8W 1/8W
Q11	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR57	1-216-296-91	METAL GLAZE	0 5%	1/8W
Q12 Q13	8-729-920-74 8-729-920-74	TRANSISTOR 2SC2412K-QR TRANSISTOR 2SC2412K-QR		JR58 JR59	1-216-296-91 1-216-296-91		0 5% 0 5%	1/8W 1/8W
Q13	0-/23-320-/4	(KV-M2541A/M2540B)						
Q14	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR60 JR61	1-216-296-91 1-216-296-91		0 5% 0 5%	1/8W 1/8W
Q102	8-729-104-80	TRANSISTOR 2SC3355		JR62	1-216-296-91	METAL GLAZE	0 5%	1/8W
Q103	8-729-900-53	TRANSISTOR DTC114EK (KV-M2540B)		JR63 JR64	1-216-296-91 1-216-296-91		0 5% 0 5%	1/8W 1/8W
Q104	8-729-900-53	TRANSISTOR DTC114EK						4 /024
		(KV-M2540B)		JR65 JR69	1-216-296-91 1-216-296-91		0 5% 0 5%	1/8W 1/8W
Q105	8-729-900-53	TRANSISTOR DTC114EK		JR70	1-216-296-91	METAL GLAZE	0 5%	1/8W
0107	8-729-920-74	(KV-M2540B) TRANSISTOR 2SC2412K-QR		JR71 JR113	1-216-296-91 1-216-295-91		0 5% 0 5%	1/8W 1/10W
Q108	8-729-907-26	TRANSISTOR IMX1				<u> </u>	•	
Q116	8-729-901-01 (KV_M2540R/M	TRANSISTOR DTC144EK-T147 2540D/M2541D/M2540K/M2541K)		JR120 JR122	1-216-295-91 1-216-295-91		0 5% 0 5%	1/10W 1/10W
Q117	8-729-901-01	TRANSISTOR DTC144EK-T147		JALLE .		2540D/M2541D/M25	40E/M2541E	/M2540K/
	(KV-M2540B/M2	2540D/M2541D/M2540K/M2541K)		JR123	1-216-295-91	M2 METAL GLAZE	541K/M2541 0 5%	L/M2541U) 1/10W
Q120	8-729-216-22					2540D/M2541D/M25	40E/M2541E	/M2540K/
Q121	8-729-216-22	TRANSISTOR 2SA1162-G (KV-M2540B)				M	2541K/M254	TD/MZ2410)
Q123	8-729-901-01	TRANSISTOR DTC144EK		JR125	1-216-295-91	METAL GLAZE	0 5% 1 <b>a/m254</b> 0E/3	1/10W M2541E)
Q125	8-729-900-53	TRANSISTOR DTC114EK (KV-M2540B)		JR126		METAL GLAZE	0 5%	1/10W
0121	0 700 016 00			JR127	1-216-295-91		0 5% KV-M2541L/	1/10W m2541U)
Q131 Q132	8-729-216-22 8-729-920-74	TRANSISTOR 2SA1162-G TRANSISTOR 2SC2412K-QR						
Q133	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR201			0 5% 0 5%	1/10W 1/10W
Q134 Q304	8-729-900-53 8-729-920-74	TRANSISTOR DTC114EK TRANSISTOR 2SC2412K-QR		JR401		(KV-M2540B/M254	OD/M2540E/	M2540K)
0312				JR402	1-216-295-91	METAL GLAZE (KV-M2540B/M254	0 5%	1/10W
Q312 Q313	8-729-920-74 8-729-920-74					PCAN (GOTCAR FAL)	; <u></u>	



REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTIO	N			REMARK
JR403	1-216-295-91	METAL GLAZE 0 (KV-M2540B/M2540I		L/10W 540K)	R105 R106	1-216-025-00 1-216-025-00	METAL GLAZE METAL GLAZE	100 100	5% 5%	1/10W 1/10W	
JR404		METAL GLAZE 0		L/10W							
JR405		METAL GLAZE 0		L/10W	R107	1-216-053-00		1.5K	5%	1/10W	
JR406	1-216-295-91	METAL GLAZE 0	5% 1	L/10W	R108	1-216-059-00		2.7K	5%	1/10W	
					R109	1-216-180-00		180	5%	1/8W	
JR407	1-216-295-91			L/10W	R110	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
JR1004	1-216-295-91	METAL GLAZE 0	5% 1	L/10W	R111	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1	1-216-049-00	METAL GLAZE 1F		L/10W	R112	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
- 4		44	(KV-M25		R113	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R6	1-216-025-00	METAL GLAZE 10		L/10W	R114	1-216-073-00		10K	5%	1/10W	
R16	1-216-049-00	METAL GLAZE 1F		L/10W	R115 R116	1-218-755-11 1-216-113-00	METAL CHIP	130K 470K		1/10W	
			(KV-M2	1400/	KIIO	1-210-113-00	METAL GLAZE	4/01	5%	1/10W	
R21	1-216-033-00	METAL GLAZE 22	0 5% 1	L/10W	R117	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R24	1-216-049-00	METAL GLAZE 1F		L/10W	R118	1-216-107-00		270K	5%	1/10W	
R25	1-216-073-00			L/10W	R119	1-216-049-00		1K	5%	1/10W	
R26	1-216-025-00	METAL GLAZE 10		L/10W	R121	1-216-035-00		270	5%	1/10W	
R27	1-216-065-00		7K 5% 1	L/10W	R122	1-216-089-91		47K	5%	1/10W	
R29	1-216-049-00	METAL GLAZE 1F		L/10W	R123	1-216-089-91		47K	5%	1/10W	
R31	1-216-049-00	METAL GLAZE 1F		L/10W	R124	1-216-031-00		180	5%	1/10W	
R33	1-216-063-00			L/10W	R125	1-216-065-00		4.7K		1/10W	
R35	1-216-065-00			L/10W	R126 R127	1-216-065-00 1-216-041-00		4.7K 470	5% 5%	1/10W	
R44	1-216-121-00	METAL GLAZE 1M	1 3% .	L/10W		1-216-041-00	METAL GLAZE	4/0	2%	1/10W	
R46	1-216-049-00	METAL GLAZE 1F		L/10W	R130	1-216-043-00		560	5%	1/10W	
R47	1-216-073-00	METAL GLAZE 10		L/10W	R131	1-216-043-00		560	5%	1/10W	
R49	1-216-025-00	METAL GLAZE 10		L/10W	R134	1-216-057-00		2.2K		1/10W	
R50	1-216-049-00	METAL GLAZE 1F		L/10W	-425	,	40B/M2540D/M25			,	
R54	1-216-049-00	METAL GLAZE 1F	5% 1	L/10W	R135	1-216-057-00	METAL GLAZE 40B/M2540D/M25	2.2K		1/10W	
R59	1-216-121-00	METAL GLAZE 1M	5% 1	L/10W		114-1125	20D/M2J2VD/M2J	TID/ NZ.	J201(/ FL	DJETI()	
R60	1-216-025-00	METAL GLAZE 10		L/10W	R136	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R61	1-216-025-00	METAL GLAZE 10	0 5% 1	L/10W	R139	1-216-065-00		4.7K	5%	1/10W	
R66	1-216-033-00	METAL GLAZE 22	0 5% 1	L/10W	R140	1-216-089-91		47K	5%	1/10W	
R70	1-216-049-00	METAL GLAZE 1F	5% 1	L/10W	R143	1-216-057-00		2.2K		1/10W	
DE1	4 04 6 004 00		F0. 1	14.0**		(KV-M25	40B/M2540D/M25	41D/M2	540K/M	2541K)	
R71 R72	1-216-081-00 1-216-081-00	METAL GLAZE 22 METAL GLAZE 22		L/10W L/10W	B144	1-216-059-00	MEMBI CIAZZ	2 72	EQ.	1 /1 014	
R73	1-216-075-00	METAL GLAZE 12		L/10W	R144 R146	1-216-057-00		2.7K 2.2K	5%	1/10W 1/10W	
R75	1-216-081-00	METAL GLAZE 22		L/10W	R147	1-216-037-00		220	5%	1/10W	
R76	1-216-031-00	METAL GLAZE 10		1/10W	WTZ1		540D/M2541D/M2				/
	2 220 0/0 00			.,		(217 2200 4 200) 200	0100/1100110/110	0 . 0		(2541K)	
R77	1-216-065-00	METAL GLAZE 4.	7K 5% 1	L/10W		1-216-031-00	METAL GLAZE	180			
R78	1-216-037-00		10 5% 1	L/10W			•		(KV-M	2540B)	
R79	1-216-065-00			L/10W		1-216-037-00		330	5%	1/10W	
R82	1-216-073-00			L/10W				(KV-M2	541L/M	2541U)	
R83	1-216-065-00	METAL GLAZE 4.	7K 5% 1	L/10W	7150	1 016 005 01	MDWAT GTARB	٥	F0.	1 /1 057	
R84	1 016 065 00	MEMAT CTAPE A	7 F G 1	1/10W	R150	1-216-295-91	METAL GLAZE 540B/M2540D/M2	0 = 41 D /W	5% 1540=/1	1/10W	,
R85	1-216-065-00 1-216-025-00			1/10W 1/10W		VA_WTBC7W_AV	D#UD/M4D#UD/M4		2540E/I 2540K/I		
R86	1-216-025-00			L/10W		1-216-053-00	METAL GLAZE	1.5K		1/10W	•
R87	1-216-073-00			1/10W		1 210 055 00		(KV-M2			
R88	1-216-065-00			/10W				(200	, , , , , , , , , ,	,,	
					R151	1-216-081-00		22K	5%	1/10W	
R89	1-216-073-00			L/10W	R152	1-216-174-00		100	5%	1/8W	
R90	1-216-073-00			./10W	R160	1-216-049-00		1K	5%	1/10W	
R91	1-216-049-00			./10W	R161	1-216-031-00		180	5%	1/10W	,
R92 R93	1-216-049-00 1-216-049-00			/10W ./10W		(KV-MZ54LA/MZ	540B/M2540D/M2		2540E/N 2540K/N		
NJ J	1-210-043-00	METAL CHARE IF		./ 1011		1-216-047-00	METAL GLAZE	820 M2		1/10W	
R94	1-216-039-00	METAL GLAZE 39	0 5% 1	/10W				(KV-M25			
R95	1-216-049-00	METAL GLAZE 18		/10W							
R96	1-216-071-00			/10W	R162	1-216-017-00		47	5%	1/10W	
R97	1-216-049-00			/10W	R163	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R99	1-216-049-00	METAL GLAZE 1F	5% 1	./10W	R164	1-216-025-00		100	5%	1/10W	
R101	1 01/ 053 00	WEEKI GIRES 40	T FO. 4	/1 Ota	R165	1-216-089-91		47K	5%	1/10W	
R101 R103	1-216-073-00 1-216-077-00			./10W ./10W	R166	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R103	1-216-077-00			./10W	R170	1-216-073-00	METAL CLASS	10K	5%	1/10W	
	T-710-013-00	MEINE GUNDE IV	.r. 2.0 7	., 2011	NI/U	1 210-0/3-00	WOTUR GRAVE	TAV	J10	±, ±0H	

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REF.NO.	PART NO.	DESCRIPTIO	N		REMARK	REF.NO.	PART NO.	DESCRIPTIO	<u>N</u>		REM	IARK
R171	1-216-035-00		270	5%	1/10W	R352	1-216-123-11		1.2M		1/10W	
R172	1-216-295-91 1-216-035-00		0 270	5% 5%	1/10W 1/10W	R354 R355	1-216-025-00 1-216-065-00		100 4.7K	5% 5%	1/10W 1/10W	
R173 R174		METAL GLAZE	3.3K		1/10W 1/10W	R356	1-216-025-00		100	5%	1/10W	
					4.440	R364	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R180 R182	1-216-049-00 1-216-073-00		1K 10K	5% 5%	1/10W 1/10W	R365	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R183		METAL GLAZE	5.6K	5%	1/10W			540B/M2540D/M	2541D/M	2540E	/M2541E/	
R185	1-216-071-00		8.2K	5%	1/10W		1 216 027 00	MEMAT CLASS			/M2541K)	
R186	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		1-216-027-00	METAL GLAZE	120 (KV-M	5% [25 <b>41</b> L]	1/10W /M2541U)	
R193	1-216-049-00	METAL GLAZE	1K	5%	1/10W	D270	1 216 022 00	MEMBI CIACE			1/10W	
R194	1-216-180-00	METAL GLAZE	180	(KV-M 5%	2540B) 1/8W	R370 R371	1-216-033-00 1-216-033-00		220 220	5% 5%	1/10W 1/10W	
R195	1-216-113-00		470K	5%	1/10W	R372	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R196	1-216-017-00		47	5%	1/10W	R373	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R199	1-216-037-00	METAL GLAZE	330	5%	1/10W	R380	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
VIII		2540D/M2541D/M2			M2540K/	R381	1-216-025-00	METAL GLAZE	100	5%	1/10W	
					M2541K)	R382	1-216-053-00	METAL GLAZE	1.5K		1/10W	
	1-216-051-00	METAL GLAZE	1.2K		1/10W M2540B)	R383 R384	1-216-049-00 1-216-053-00	METAL GLAZE METAL GLAZE	1K 1.5K	5% 5%	1/10W 1/10W	
	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R385	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
			(KV-M2						450	E0.	1 /1 /5	
R200	1-216-047-00	METAL GLAZE	820	5%	1/10W	R386 R387	1-216-041-00 1-216-041-00	METAL GLAZE METAL GLAZE	470 470	5% 5%	1/10W 1/10W	
R200 R201	1-216-053-00		1.5K		1/10W	R388	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R204	1-216-025-00	METAL GLAZE	100	5%	1/10W	R389	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R205 R206	1-216-025-00 1-216-049-00		100 1K	5% 5%	1/10W 1/10W	R390	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
K200	1-210-049-00	METAL GLAZE	TV	24	1/10#	R392	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R207	1-216-049-00		1K	5%	1/10W	R393	1-216-089-91		47K	5%	1/10W	
R210 R211	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	R407 R408	1-216-198-91 1-216-067-00	METAL GLAZE METAL GLAZE	1K 5.6K	5% 5%	1/8W 1/10W	
R211	1-216-025-00		27K	5%	1/10W 1/10W	R409	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R217	1-216-031-00		180	5%	1/10W		1 016 005 00	WEMAT OTAE	100	E0.	1 /1 057	
<b>D220</b>	1 216 174-00	METAL GLAZE	100	5%	1/8W	R410 R413	1-216-025-00 1-216-033-00	METAL GLAZE METAL GLAZE	100 220	5% 5%	1/10W 1/10W	
R220 R305	1-216-174-00 1-216-049-00		100 1K	5%	1/10W	R415	1-216-053-00	METAL GLAZE	5.6K		1/10W	
			(KV-M2	541L/M	2541U)	R417	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R308 R309	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	R419	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
KOOS	1-216-025-00	METAL GLAGE	100	20	1/10#	R420	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R311	1-216-025-00		100	5%	1/10W	R421	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R313	1-216-025-00 1-216-025-00		100 100	5% 5%	1/10W 1/10W	R422 R423	1-216-022-00 1-216-093-00	METAL GLAZE	75 68K	5% 5%	1/10W 1/10W	
R315 R316	1-216-025-00		100	5%	1/10W	R423	1-216-093-00		470K		1/10W	
R317	1-216-025-00		100	5%	1/10W							
p210	1 016 040 00	WDM31 O1307	1 27	E0	1 /1 0W	R425 R426	1-216-022-00 1-216-025-00		75 100	5% 5%	1/10W 1/10W	
R318 R319	1-216-049-00 1-216-025-00		1K 100	5% 5%	1/10W 1/10W	R420	1-216-125-00		390	5%	1/8W	
R320	1-216-025-00	METAL GLAZE	100	5%	1/10W	R429	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R321	1-216-025-00	METAL GLAZE	100	5% 5%	1/10W	R430	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R322	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	R431	1-216-188-00	METAL GLAZE	390	5%	1/8W	
R323	1-216-049-00		1K	5%	1/10W	R432	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R325	1-216-049-00		1K	5%	1/10W	R433	1-216-067-00			5% 5%	1/10W	
R326 R327	1-216-077-00 1-216-097-00		15K 100K	5% 5%	1/10W 1/10W	R435 R437	1-216-039-00 1-216-073-00		390 10K	5% 5%	1/10W 1/10W	
R328	1-216-097-00		100k	5%	1/10W 1/10W	143/						
				F0		R438	1-216-089-91		47K	5%	1/10W	
R329 R330	1-216-067-00 1-216-033-00		5.6K 220	5% 5%	1/10W 1/10W	R439 R446	1-216-071-00 1-216-025-00	METAL GLAZE	8.2K 100	5% 5%	1/10W 1/10W	
R331	1-216-033-00		220	5%	1/10W 1/10W	R447	1-216-025-00		100	5%	1/10W	
R332	1-216-033-00	METAL GLAZE	220	5%	1/10W	R454	1-216-089-91		47K	5%	1/10W	
R333	1-216-689-11	METAL CHIP	39K	0.50%	3 1/10W	R458	1-216-049-00	MRPAT. (21.372	1K	5%	1/10W	
R340	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R458 R464	1-216-049-00		1K	5%	1/10W	
R341	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R465	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R342	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R473	1-216-022-00		75 1 kg	5% 5%	1/10W 1/10W	
R351		METAL GLAZE 2540B/M2540D/M	6.8K 2541D/M		1/10W M2541U)	R474	1-216-049-00	METAL GLAZE	1K	5%	T/ TOM	
	/*** **** **** ***			/	/	1						

The components identified by shading and marked a are critical for safety.

Replace only with the part number specified.





REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPT	ION		REMARK	
R477	1-216-067-00	METAL GLAZE		1/10W	Ì	< TUN	IER >				
R482		METAL GLAZE	KV-M2541L/ 10K 5%	M25410) 1/10W	TU101	1-693-185-11					
R483		METAL GLAZE 1 2540B/M2540D/M254		1/10W /M2541E/ /M2541K)		1-693-184-11	M2540D/M2541D/M2540E/M2541E/ M2540K/M2541K/M2541L) TUNER (U944C) (KV-M2541U)				
	1-216-047-00	METAL GLAZE (		1/10W			STAL >	0, (1.1 1.200	, _ ,		
		•			***						
R484 R485			100 5% 100 5%	1/10W 1/10W	X2 X301	1-579-063-21 1-760-331-11					
R486	1-216-025-00	METAL GLAZE	100 5%	1/10W	X1001	1-567-495-11	OSCILLATOR,	CRYSTAL			
R487 R488			75 5% 75 5%	1/10W 1/10W		(KV-M2541A/M2	2541D/M2541E/	M2541K/M2541	LL/M2541	U)	
			7E F0	·	*****	***********	*******	******	******	******	
R489	1-216-022-00	METAL GLAZE	75 5%	1/10W		*A-1638-052-A	C BOARD, CO	MPLETE			
(1)		001 - R1029 > D/M2541E/M2541K/I	W25/11./W25	<b>Λ1</b> π\			******	*****			
(1			W734TF/W73	410)		< CAI	PACITOR >				
R1001 R1002			0 5% 100 5%	1/10W 1/10W	C702	1-102-824-00	CERAMIC	470PF	5%	50V	
R1002			100 5%	1/10W	C702	1-102-115-00		560PF	10%	50V	
R1005	1-216-073-00	METAL GLAZE	10K 5%	1/10W	C704	1-102-117-00		820PF	10%	50V	
R1008	1-216-085-00	METAL GLAZE	33K 5%	1/10W	C706 C706	1-102-113-00 1-102-822-00		390PF 390PF	10% 5%	50V 50V	
R1009			100 5%	1/10W						7 - 1	
R1010	1-216-053-00		1.5K 5%	1/10W	C707 C708	1-162-116-00		680PF 0.0047MF	10%	2KV 2KV	
R1011 R1012	1-216-053-00		1.5K 5% 1.5K 5%	1/10W 1/10W	C708	1-162-114-00 1-102-114-00		470PF	10%	50V	
R1014	1-216-025-00		100 5%	1/10W	C710 C712	1-123-947-00 1-102-115-00	ELECT	10MF 560PF	20% 10%	250V 50V	
R1015			100 5%	1/10W							
R1016 R1025	1-216-049-00		1K 5% 220 5%	1/10W 1/10W	C714 C717	1-124-360-00 1-102-114-00		1000MF 470PF	20% 10%	16V 50V	
R1025			220 5%	1/10W	C718	1-102-114-00		470PF	10%	50V	
R1027	1-216-033-00		220 5%	1/10W	C719	1-102-114-00	CERAMIC	470PF	10%	- 50V	
R1029	1-216-025-00	METAL GLAZE	100 5%	1/10W		< COM	NECTOR >				
	< VA	RIABLE RESISTOR	>		CN701 CN703	1-508-768-00 *1-568-882-51			CH) 6P		
RV102	1-241-765-11	RES, ADJ, CARBO	ON 22K (KV	-M2540B)	CN705	1-695-915-11					
	< RE	SISTOR NETWORK >				< DIC	DDE >				
RA1		RESISTOR, NETWO			D701	8-719-110-14					
RA2 RA3		RESISTOR, NETWO			D702 D703	8-719-901-33 8-719-901-33					
RA7		RESISTOR, NETWO			D704	8-719-901-33					
RA8	1-239-412-11	NETWORK, RESIS	TOR (CHIP	TYPE)	D705	8-719-901-33	DIODE 1SS13	3			
RA9	1-239-412-11	NETWORK, RESIST	TOR (CHIP	TYPE)	D706	8-719-901-33	DIODE 1SS13	3			
RA10	1-236-908-11	RESISTOR, NETWO	ORK (CHIP	TYPE)	D707	8-719-901-33					
RA11	1-236-904-11	RESISTOR, NETWO	ORK (CHIP	TYPE)	D708 D709	8-719-901-33 8-719-901-33					
	< FI	LTER >			D710	8-719-901-33		-			
SWF101	1_570_273_11	FILTER, SURFAC	E WAVE		D711	8-719-302-43	DIODE RLIZ				
PULTUI		2540B/M2540D/M25			D711	8-719-901-33		3			
#1 To 1 To 1		FILTER, SURFAC	E WAVE (KV	,,		< CRI	SOCKET >				
SWF102		FILTER, SURFACT	40E/M2541E		Į, Ņ,		SOCKET, CRT				
	1-760-244-11	M25	41K/M2541L E WAVE (KV			< CO1	IL >				
					L704	1-408-609-41	INDUCTOR	33UH			
						< TRA	ANSISTOR >				

Q702

8-729-119-78 TRANSISTOR 2SC2785-HFE



The components identified by shading and marked in are critical for safety.

Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION	ON		REMARK
Q703	8-729-906-70 8-729-200-17	TRANSISTOR BF871 TRANSISTOR 2SA10				C514	1-136-165-00	FILM	0.1MF	5%	50V
Q704 Q705	8-729-200-17	TRANSISTOR 2SATU				C515	1-124-480-11	ELECT	470MF	20%	25V
Q706	8-729-906-70	TRANSISTOR BF871				C517	1-124-480-11	ELECT	470MF	20%	25V 500V
Q707	8-729-200-17	TRANSISTOR 2SA10	91-0			C518 C519	1-102-228-00 1-102-228-00	CERAMIC CERAMIC	470PF 470PF	10% 10%	500V 500V
Q708	8-729-119-78	TRANSISTOR 2SC27	85-HFE			C520	1-124-480-11	ELECT	470MF	20%	25V
Q709 Q710	8-729-906-70 8-729-200-17	TRANSISTOR BF871 TRANSISTOR 2SA10				C521	1-124-006-11	ELECT	10MF	20%	25V
Q110			.,,_			C522	1-124-907-11	ELECT	10MF	20%	50V
	< RES	SISTOR >				C523	1-136-165-00	FILM	0.1MF 0.0022MF	5% <b>20%</b>	50V 400V
R704	1-216-486-00		2K 5%	3W	F	6601 - 3			0.0047MP		250V
R705 R706	1-202-822-00 1-249-409-11	SOLID 2. CARBON 22	2K 10%	1/2W 1/4W		ionir a h		Edat Maria	E 8047MT		2500
R707	1-249-408-11	CARBON 18	30 5%	1/4W		C603	1-125-318-00	ELECT (BLOCK)	220MF	20%	400V
R709	1-202-844-00	SOLID 33	30K 10%	1/2W		C604 C605	1-124-122-11 1-124-667-11	ELECT ELECT	100MF 10MF	20% 20%	50V 100V
R711	1-249-423-11		3K 5%	1/4W		C606	1-162-318-11	CERAMIC	0.001MF	10%	500V
R712 R713	1-202-822-00 1-215-493-00	SOLID 2. METAL 1M	2K 10%	1/2W 1/4W		C607	1-124-120-11	ELECT	220MF	20%	25V
R714	1-216-486-00	METAL OXIDE 8.	2K 5%	3W	F	C608	1-109-880-11	FILM	0.0015MF	3%	2KV
R715	1-249-417-11	CARBON 1K	5%	1/4W		C611 C612	1-102-228-00 1-104-799-11	CERAMIC ELECT	470PF 22MF	10% 20%	500V 100V
R716	1-249-409-11	CARBON 22		1/4W		C612	1-124-347-00	ELECT	100MF	20%	160V
R717 R718	1-249-408-11 1-202-814-11	CARBON 18 SOLID 33		1/4W 1/2W		C614	1-126-804-11	ELECT	100MF	20%	25V
R718 R720	1-249-423-11		3K 5%	1/4W		C615	1-126-376-11	ELECT	470MF	20%	25V
R722	1-202-848-00	SOLID 68	30K 10%	1/2W		C616 C617	1-128-386-11 1-126-183-11	ELECT ELECT	1000MF 1000MF	20% 20%	25V 16V
R723	1-249-417-11	CARBON 1K	5%	1/4W		C617	1-126-183-11	FILM	0.1MF	20% 5%	50V
R724	1-202-846-00	SOLID 47	OK 10%	1/2W				CEDANTO	470pp	10%	500V
R726 R727	1-202-822-00 1-249-409-11	SOLID 2. CARBON 22	2K 10%	1/2W 1/4W		C619 C620	1-102-228-00 1-102-228-00	CERAMIC CERAMIC	470PF 470PF	10%	500V 500V
R728	1-216-350-11			1W	F	C621	1-136-165-00	FILM	0.1MF	5%	50V
R729	1-249-408-11	CARBON 18	30 5%	1/4W		C622 C623	1-104-797-11 1-124-120-11	ELECT ELECT	0.47MF 220MF	20% 20%	100V 25V
R731	1-249-423-11	CARBON 3.	3K 5%	1/4W		u e aplanta de					-
R732 R734	1-215-479-00 1-247-807-31	METAL 27 CARBON 10	OK 1%	1/4W 1/4W		C624 C625	1-136-165-00 1-124-910-11	FILM ELECT	0.1MF 47MF	5% 20%	50V 50V
R736	1-216-486-00		2K 5%	3W	F	C626	1-124-120-11	ELECT	220MF	20%	25V
R737	1-215-489-00	METAL 68	30K 1%	1/4W		C627 C628	1-124-120-11 1-124-907-11	ELECT	220MF 10MF	20% 20%	25V 50V
R739	1-249-417-11	CARBON 1K	5%	1/4W							
R741 R743	1-202-549-00 1-202-842-11	SOLID 10 SOLID 22	00 20% 0K 10%	1/2W 1/2W		C629 C630	1-126-800-51 1-126-800-51	ELECT ELECT	2200MF 2200MF	20% 20%	35V 35V
Wies			.VI. 100	1/411		C631	1-124-916-11	ELECT	22MF	20%	50V
	< VA	RIABLE RESISTOR >				C632	1-124-120-11		220MF 0.22MF	20%	25V 300V
RV701		RES, ADJ, METAL				. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•	ALL HOSEN PROMINENTS OF THE PROPERTY CONT.	5195347 <b>111</b> 111121212121555299	TELEPENTAL PROPERTY AND ANY
RV702	1-241-656-11	RES, ADJ, METAL	FILM 110	M			1-107-564-11 1-107-564-11		0.22MF 0.22MF	20% 20%	300V 300V
*****	********	******	******	*****	*****	C636 A	1-161-742-00	CERAMIC	0.0022MF	20%	400V
	*A-1642-121-A	D BOARD, COMPLET	ľE			C639 C640	1-136-165-00 1-106-220-00		0.1MF 0.1MF	5% 10%	50V 100V
		********									
	4-201-023-01	SPACER, INSULATI	ING			C647 C800	1-162-116-00 1-137-437-11		680PF 0.0056MF	10% 5%	2KV 50V
*	4-202-373-01					C801	1-136-153-00	FILM	0.01MF	5%	50V
	2 CA	PACITOR >				C804 C805	1-136-165-00 1-106-395-00		0.1MF 0.15MF	5% 10%	50V 200V
			_								
C502 C503	1-102-824-00 1-136-165-00			5% 5%	50V 50V	C806 C807	1-108-704-11 1-136-111-00		0.1MF 1MF	10% 5%	200V 200V
C504	1-102-824-00	CERAMIC 470	)PF	5%	50V	C810	1-124-634-11	ELECT	1MF	20%	250V
C506 C507	1-124-480-11	ELECT 470		20% 20%	25V 50V	C811 C812	1-102-212-00 1-136-111-00		820PF 1MF	10% 5%	500V 200V
	1-124-767-00		erir	400	204	C014	1 130-111-00	LITH	LEIF		
C509 C510	1-136-165-00 1-124-911-11			5% 20%	50V 50V	C813 C814	1-136-759-11 1-136-591-11		0.039MF 0.017MF	10% 3%	630V 1.4KV
C511	1-136-202-11	FILM 0.3	3MF	5%	63V	C815	1-136-562-11	MYLAR	0.0082MF	10%	400V
C513	1-106-220-00	MYLAR 0.1	LMF	10%	100V	C816	1-161-754-00	CERAMIC	0.001MF	10%	2KV

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REF.NO.	PART NO.	DESCRIPTI	ION	ON REMARK			PART NO.	DESCRIPTION	REMARK
C817	1-161-754-00	CERAMIC	0.001MF	10%	2KV	D506 D507		DIODE 1SS133 DIODE RD5.1ESB2	
C818	1-162-134-11	CERAMIC	470PF	10%	2KV	D600		DIODE D4SB60L	
C819	1-136-208-11		0.068MF	10%	250V	D601	8-719-046-77	DIODE EM1-V1	
C820	1-102-114-00		470PF	10%	50V	D603	8-719-109-97	DIODE RD6.8ESB2	
C821 C822	1-162-114-00 1-123-948-00		0.0047MF	20%	2KV	DEM	0 710 046 75	DIODE BY 1 VI	
C022	1-123-946-00	ELECT	22MF	20%	250V	D604 D605		DIODE EU-1-V1 DIODE EU-1Z	
C824	1-123-024-21	ELECT	33MF		160V	D606		DIODE EU-1Z	
C829	1-124-902-00		0.47MF	20%	50V	D607	8-719-046-78	DIODE EG-1Z-V1	
C830	1-136-165-00		0.1MF	5%	50V	D608	8-719-046-75	DIODE EU-1-V1	
C832 C834	1-136-173-00 1-126-233-11		0.47MF 22MF	5% 20%	50V 25V	D609	0 710 201 64	DIODE BUADO	
C034	1-120-233-11	PDPCI	22MF	20%	23V	D610		DIODE RU4DS DIODE AU-01Z-V1	
C835	1-162-318-11	CERAMIC	0.001MF	10%	500V	D611	8-719-302-43		
C836	1-162-117-00		100PF	10%	500V	D612	8-719-046-76	DIODE RU-3YX-V1	
C838	1-102-228-00		470PF	10%	500V	D613	8-719-302-43	DIODE EL1Z	
C906 C908	1-124-910-11 1-124-910-11		47MF 47MF	20% 20%	50V 50V	D614	8-719-302-43	DTADE EL17	
C300	1 124-710-11	EDBC1	4 / 111	200	304	D615		DIODE EU-1-V1	
C909	1-124-903-11	ELECT	1MF	20%	50V	D616		DIODE RD7.5ESB2	
C910	1-137-393-91	FILM	0.01MF	5%	100V	D617		DIODE 1SS133	
C1200	1-136-165-00		0.1MF	5%	50V	D618	8-719-901-33	DIODE 1SS133	
C1201 C1202	1-136-165-00 1-136-165-00		0.1MF 0.1MF	5% 5%	50V 50V	D619	8-710-001-33	DIODE 1SS133	
01202	1 130 103 00	FIDM	V. IM	3.0	304	D620	8-719-901-33	DIODE 1SS133	
C1203	1-136-169-00		0.22MF	5%	50V	D622		DIODE MTZJ-9.1	
C1204	1-136-169-00		0.22MF	5%	50V	D625		DIODE 1SS133	
C1205 C1206	1-101-005-00 1-101-005-00		0.022MF 0.022MF		50V	D626	8-719-046-74	DIODE AU-01Z-V1	
C1200	1-101-003-00		100MF	20%	50V 16V	D800	8-719-901-33	DIODE 1SS133	
V	- 120 101 11	22201	200111	20.0	101	D801		DIODE 1SS133	
C1208	1-124-927-11	ELECT	4.7MF	20%	50V	D802	8-719-901-33	DIODE 1SS133	
C1209	1-124-927-11		4.7MF	20%	50V	D803	8-719-908-03		
C1210 C1211	1-124-925-11 1-124-925-11		2.2MF 2.2MF	20% 20%	50V 50V	D807	8-719-302-43	DIODE EL1Z	
C1214	1-126-101-11		100MF	20%	16V	D808	8-719-908-03	DIODE GP08D	
						D809		DIODE RGP02-20EL-6394	
C1215	1-136-173-00		0.47MF	5%	50V	D810	8-719-302-43		
C1216 C1217	1-137-366-11 1-137-366-11		0.0022MF 0.0022MF	5%	50V	D812	8-719-038-49		
C1217	1-124-120-11		220MF	5% 20%	50V 16V	D815	8-719-908-03	DIODE GP08D	
				-00	201	D817	8-719-109-89	DIODE RD5.6ESB2	
	< CON	NECTOR >				D902	8-719-921-69	DIODE MTZJ-9.1	
cycaa .	1-508-786-00	DEN 29/03/27/40	ND IEUG DES	OE 1 2 2		D903 D904		DIODE MTZJ-9.1 DIODE MTZJ-9.1	
CN601	1-508-765-00	PIN, COMMECT	OR (SMM PIT	CR) 1P		D904 D905		DIODE MTZJ-9.1	
CN602 /	*1-695-292-11	PIN, CONNECT	OR (POWER)						
CN800	*1-580-798-11					D906	8-719-921-69	DIODE MTZJ-9.1	
CN803	1-695-915-11	TAB (CONTACT	?)			D1201 D1202	8-719-109-72 1-247-807-31	DIODE RD3.9ESB2	s of
CN804	1-508-768-00	PIN, CONNECT	OR (5MM PIT	CH) 6P		D1202	1-24/-00/-31	CARBON 100 5% 1/49	~
CN807	1-568-878-51	PIN, CONNECT	OR 3P				< FER	RITE BEAD >	
CN901	*1-564-520-11						4 444 44- 44		
CN902 CN903	1-695-299-11 *1-564-516-11			RD 50P		FB600 FB601		FERRITE BEAD INDUCTOR 1.1UH FERRITE BEAD INDUCTOR 1.1UH	
CMJ0J	-1-204-210-11	PLOG, CONNEC	TON 13P			FB602		FERRITE BEAD INDUCTOR 1.1UH	
CN904	*1-564-509-11					FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
CN904	*1-568-881-51					FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
CN905 CN905	*1-564-509-11 *1-569-979-51					PDCAC	1 410 207 24	EEDDING DEAD TWOMON 4 4****	
CN1200	*1-568-878-51 *1-568-879-11					FB606 FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH FERRITE BEAD INDUCTOR 1.1UH	
	2 300 077 11	- 2017 - COMMINICI	V-1 24			15007	T 410.731.71	PERMITE BEAD INDUCTOR 1.1UB	
CN1201	*1-568-878-51	PIN, CONNECT	OR 3P				< IC	>	
	< DIO	DE >				IC500	8-759-192-71		
D500	8-719-109-85	חז חום שחם זה	(מסי			IC600	8-759-183-88	IC STR-S6708	
D500	8-719-109-85					IC601 A		IC TLP721 (D4) -GR IC SE135N-LF12	
D503	8-719-979-85					IC603		IC LM2940CT-5.0	
D504	8-719-901-33	DIODE 1SS133							
D505	8-719-982-03	DIODE MTZJ-3	.6A			IC604	8-759-250-63	IC TL750L05CLPR	



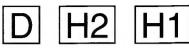
The components identified by shading and marked is are critical for safety.

Replace only with the part number specified.

	2000		<b></b>	DEE NO	DARTNO	DECODIDA	M		REMARK
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTIO	<u>'N</u>		NEMANN
IC605 IC606 IC800 IC1200	8-759-701-79 8-759-267-25 8-759-103-93 8-759-279-43	IC NJM7812FA IC LM2940T-90 IC UPC393C IC TDA7261		R510 R517 R518	1-249-443-11 -1-215-427-00 1-215-427-00	METAL METAL	0.47 5% 1.8K 1% 1.8K 1%	1/4W 1/4W 1/4W	F
IC1201	8-759-502-21	IC TDA2822M		R520 R521 R522	1-215-457-00 1-215-459-00 1-249-433-11	METAL CARBON	33K 1% 39K 1% 22K 5%	1/4W 1/4W 1/4W	
L502 L503 L609 L611	1-412-519-11 1-412-519-11 1-412-533-21 1-412-527-11	INDUCTOR 3.3UH INDUCTOR 3.3UH INDUCTOR 47UH INDUCTOR 15UH		R523 R524 R525 R526 R527	1-249-433-11 1-249-425-11 1-249-425-11 1-249-421-11 1-215-449-00	CARBON CARBON CARBON	22K 5% 4.7K 5% 4.7K 5% 2.2K 5% 15K 1%	1/4W 1/4W 1/4W 1/4W 1/4W	
L612 L613 L801 L802 L803 L804	1-414-415-11 1-459-111-00 1-459-104-00 1-420-872-00 1-409-770-11	INDUCTOR 3.3UH INDUCTOR 3.3UH INDUCTOR 47UH INDUCTOR 47UH INDUCTOR, WIDE BAND INDUCTOR, WIDE BAND COIL, DRAM CORE (CDI) COIL, WITH CORE COIL, AIR CORE COIL, HORIZONTAL LINEARI COIL, CHOKE 4.7MMH INDUCTOR 47UH LINK >  LINK, IC 2.7A (ICP-F75)	TY	R528 R529 R600 R601 R603	1-259-877-11 1-247-895-00 1-216-490-71 1-249-417-11 1-215-875-11	CARBON METAL OXIDE CARBON	1.2M 5% 470K 5% 39K 5% 1K 5% 10K 5%	1/4W 1/4W 3W 1/4W 1W	F F
L805 L809	1-406-675-11 1-412-533-21	COIL, CHOKE 4.7MMH INDUCTOR 47UH		R604 R605 R607 R608 R610	1-249-420-11 1-216-362-71 1-216-421-71 1-216-365-00 1-249-417-11	METAL OXIDE METAL OXIDE METAL OXIDE	1.8K 5% 0.27 5% 12 5% 0.47 5% 1K 5%	1/4W 2W 1W 2W 1/4W	F F
FDUUM ZAS	T. 334 AAA UT	LINK, IC 2.7A (ICP-P75) LINK, IC 0.4A (ICP-P10)		R611 R612 R613 R614 R615	1-215-859-00 1-249-428-11 1-249-417-11 1-215-877-11 1-249-435-11	METAL OXIDE CARBON CARBON METAL OXIDE	22 5% 8.2K 5% 1K 5% 22K 5% 33K 5%	1W 1/4W 1/4W 1W 1/4W	F F
***************************************	< TRA	NSISTOR >	(44)	R616	1-215-479-00	METAL	270K 1%	1/4W	200
Q501 Q502 Q503 Q601	8-729-119-78 8-729-173-38 8-729-900-89 8-729-025-05			R617 R618 R619 R620	1-215-901-00 1-249-429-11 1-216-425-11 1-247-895-00	CARBON METAL OXIDE	33K 5% 10K 5% 56 5% 470K 5%	2W 1/4W 1W 1/4W	F
Q602 Q603 Q604	8-729-320-28 8-729-027-08 8-729-024-35	TRANSISTOR 2SA1667  TRANSISTOR 2SC2389STP-R TRANSISTOR 2SC2808STP-R		R621 R622 R623 R624 R625	1-216-425-11 1-249-437-11 1-249-429-11 1-249-405-11 1-249-434-11	CARBON CARBON CARBON	56 5% 47K 5% 10K 5% 100 5% 27K 5%	1W 1/4W 1/4W 1/4W 1/4W	F
Q605 Q606 Q607	8-729-119-78 8-729-900-65 8-729-119-78 8-729-119-78	TRANSISTOR 2SC2785-HFE TRANSISTOR DTA144ES TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE		R626 R628 R629	1-249-430-11 1-249-415-11	CARBON CARBON	12K 5% 680 5%	1/4W 1/4W 1/2W	
Q801 Q802 Q803 Q805	8-729-017-06 8-729-016-32 8-729-119-80 8-729-900-89	TRANSISTOR 2SC4793 TRANSISTOR 2SC4927-01 TRANSISTOR 2SC2688-LK		R632	1-205-949-11 1-247-807-31	WIREWOODD CARBON	8.2M 5% 1.8 5% 100 5%	1W 10W 1/4W	
Q1200 Q1201 Q1202 Q1203	8-729-119-78 8-729-900-80 8-729-900-74	TRANSISTOR DTC143TS		R633 R634 R635 R636	1-247-807-31 1-249-397-11 1-249-437-11 1-249-417-11 1-249-409-11	CARBON CARBON CARBON	100 5% 22 5% 47K 5% 1K 5%	1/4W 1/4W 1/4W 1/4W	F
Q1204		TRANSISTOR DTC143TS		R637 R638	1-249-433-11	CARBON	22K 5%	1/4W	
JW800	< RES	CARBON 2.2M 5%	1/4W	R639 R640 R641	1-249-429-11 1-216-381-11 1-216-381-11	METAL OXIDE	10K 5% 0.22 5% 0.22 5%	1/4W 3W 3W	F F
R500 R502 R503 R504 R505	1-215-457-00 1-249-421-11 1-249-429-11 1-215-463-00 1-249-382-11	CARBON         2.2K         5%           CARBON         10K         5%           METAL         56K         1%	1/4W 1/4W 1/4W 1/4W F	R642 12 R643 R644 R645 R646	1-205-949-11 1-249-423-11 1-247-807-31 1-249-422-11 1-249-377-11	CARBON CARBON CARBON	1.8 5% 3.3K 5% 100 5% 2.7K 5% 0.47 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F
R506 R507 R508 R509	1-215-413-00 1-215-888-00 1-216-371-00 1-249-443-11	METAL OXIDE 220 5% METAL OXIDE 1.5 5%	1/4W 2W F 2W F 1/4W F	R647 R648 R800 R801	1-202-933-61 1-216-397-11 1-249-421-11 1-249-429-11	METAL OXIDE CARBON	0.1 10% 4.7 5% 2.2K 5% 10K 5%	1/2W 3W 1/4W 1/4W	F F

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REF.NO.	PART NO.	DESCRIPTIO	N			REMARK	REF.NO.	PART NO.	DESCRIPT	ION		REMARK
R802	1-249-431-11	CARBON	15K	5%	1/4W			< REI	LAY >			
R803	1-249-426-11		5.6K			- 1	RY600 1	1-515-720-31	RELAY			
R804 R805	1-249-430-11 1-249-425-11	CARBON	12K 4.7K		1/4W 1/4W	E.S. S		< SPA	ARK GAP >			
R809 R812	1-247-901-11 1-249-421-11		820K 2.2K	5% 5%	1/4W 1/4W		SG801	1-519-422-11	GAP, SPARK			
R813	1-215-869-11		1K	5%	1W	F		< TRA	ANSFORMER >			
R814 R816	1-249-411-11 1-215-918-00	METAL OXIDE	330 1.5K		1/4W 3W	F		1-421-776-11				
R817 R818	1-215-918-00 1-215-882-00	METAL OXIDE	1.5K 22	5% 5%	3W 2W	F F		1-426-805-11	TRANSFORMER			
R819	1-216-345-11		0.47		1W	F	T800 T803	1-421-794-21 1-453-169-11			(PMT)	
R820 R821	1-249-403-11 1-215-909-11	METAL OXIDE	68 47	5% 5%	1/4W 3W	F	T804	1-437-090-00	HDT			
R822 R824	1-215-868-00 1-249-420-11		680 1.8K	5% 5%	1W 1/4W	F		< THI	ERMISTOR >			
R826	1-247-752-11		1K	5%	1/2W		PH22600 a	1-349-327-11	Turka serek	POSTATAR		
R827 R828	1-249-425-11 1-249-433-11	CARBON	4.7K 22K	5%	1/4W 1/4W		******	*******	*******	******	******	******
R829 R830	1-215-463-00 1-217-778-11		56K 1K	1% 5%	1/4W 1W	F		*1-652-269-11	H2 BOARD			
R833 R836	1-249-421-11 1-249-439-11		2.2K 68K	5% 5%	1/4W 1/4W	F		< CAI	PACITOR >			
R837 R840	1-215-449-00 1-247-807-31	METAL	15K 100	1% 5%	1/4W 1/4W		C904	1-124-910-11		47MF	20%	50V
R841	1-249-418-11		1.2K		1/4W		C905	1-124-907-11		10MF	20%	50V
R842 R843	1-249-441-11 1-247-903-00		100K 1M	5% 5%	1/4W 1/4W			< CO1	NECTOR >			
R846 R847	1-249-441-11 1-247-891-00	CARBON	100K 330K		1/4W 1/4W		CN907 CN907	*1-564-509-11 *1-568-881-51				
R848	1-247-887-00		220K	5%	1/4W			< DIC	DDE >			
R849 R850	1-249-429-11 1-249-425-11		10K 4.7K	5% 5%	1/4W 1/4W		D901	8-719-030-11	DIODE SLA-5	70KT3F		
R851 R852	1-247-755-11 1-249-432-11	CARBON	1.8K 18K	5% 5%	1/2W 1/4W	F		< IC	>			
R901	1-202-539-00	SOLID	39	10%	1/2W		IC900	8-741-790-11	IC SBX1790-	11		
R902 R907	1-202-539-00 1-247-804-11	CARBON	39 75	10% 5%	1/2W 1/4W			< RES	SISTOR >			
R916 R917	1-249-397-11 1-249-397-11		22 22	5%	1/4W 1/4W		R900	1-249-409-11		220 59		
R1200	1-249-425-11		4.7K		1/4W		R908	1-249-401-11		47 59		
R1201 R1202	1-249-434-11 1-249-393-11	CARBON	10	5% 5%	1/4W 1/4W	F	******	*********		********	******	*****
R1203 R1204	1-249-421-11 1-249-421-11	CARBON	2.2K 2.2K	5%	1/4W 1/4W			*1-652-275-11	H1 BOARD			
R1205	1-249-428-11		8.2K		1/4W			< CAI	PACITOR >			
R1206 R1207	1-249-428-11 1-249-417-11	CARBON	8.2K 1K	5%	1/4W 1/4W		C900	1-101-810-00		100PF	5%	500V
R1208 R1209	1-212-849-00 1-212-849-00	FUSIBLE	4.7	5% 5%	1/4W 1/4W		C902 C903	1-137-372-11 1-137-372-11	FILM	0.022MF 0.022MF	5% 5%	50V 50V
R1210	1-249-417-11		1K	5% .	1/4W		C907	1-124-903-11		1MF	20%	50V
R1211 R1212	1-249-424-11	CARBON	3.9K	5%	1/4W 1/4W		CHTO C O		NECTOR >	מר ת אחת		
R1213 R1216	1-249-421-11 1-249-413-11	CARBON	2.2K 470	5%	1/4W 1/4W		CN900 CN906	1-569-793-11 *1-564-516-11				
R1217	1-249-425-11		4.7K	5%	1/4W			< SOC	CKET >			
D17201		RIABLE RESISTO		7.07			J900	1-764-606-11	JACK			
RV301	1-238-552-11	RES, ADJ, CA	KBUN 4	/ UK								



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П		5						specified.			
REF.NO.	PART NO.	DESCRIPT	ION		REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK		
	< COI					ACCESSORIES AND PACKING MATERIALS					
L900 L901 L903	1-408-409-00 1-408-409-00 1-408-409-00	INDUCTOR	10UH 10UH 10UH		•	*	1-202-829-51	MANUAL INSTRUCTION (KV MANUAL INSTRUCTION (KV MANUAL INSTRUCTION (KV	-M2540B)		
	< RES	ISTOR >					1-202-829-81	MANUAL INSTRUCTION (KV MANUAL INSTRUCTION (KV	-M2540E)		
R905 R906 R910 R915	1-247-804-11 1-247-804-11 1-249-437-11 1-249-397-11	CARBON CARBON	75 59 75 59 47K 59 22 59	1/4W 1/4W 1/4W			1-202-829-61 *4-384-027-01 *4-200-647-12	MANUAL INSTRUCTION (KV MANUAL INSTRUCTION (KV BAG, PROTECTION CUSHION (UPPER) (ASSY)			
******			*********		******			CUSHION (LOWER) (ASSY)			
	*1-652-270-11	########						INDIVIDUAL CARTON REMOTE COMMANDER			
	< CON	NECTOR >						*********			
CN908 CN908	*1-564-506-11 *1-568-878-51						1-467-706-11	COMMANDER (RM-833)			
	< RES	ISTOR >				*****	******	*******	******		
R911 R912 R913 R914	1-249-423-11 1-249-429-11 1-249-423-11 1-249-429-11	CARBON CARBON	3.3K 59 10K 59 3.3K 59 10K 59	6 1/4W 6 1/4W							
	< SWI	TCH >									
S900 S901 S902	1-692-979-11 1-692-979-11 1-692-979-11	SWITCH, TAC	TILE								
******	******	******	******	******	*****						
		LLANEOUS									
	1-402-746-11 8-451-311-34 1-504-698-11 1-452-032-00 1-452-094-00	DEFLECTION SPEAKER MAGNET, DIS	YOLK (Y25F) SK; 10MM	***************************************							

1-693-184-11 TUNER (U944C)

1-453-169-11 FBT ASSY (UX1604A2) V901 A. 8-733-231-05 CRT SD-178 (A59JWC61X)

(KV-M2541U/M2541L)

1-693-185-11 TUNER (UV916H) (KV-M2541A/M2540B/

M2540D/M2541D/M2540E/M2541E/ M2541L/M2540K/M2541K)

(KV-M2541U)